









Office of the Chief Financial Officer ANNUAL REPORT 1

Ernest Orlando Lawrence Berkeley National Laboratory University of California Berkeley, California

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FY2013 presented Lawrence Berkeley National Laboratory (LBNL) with an array of financial challenges. At the federal budget level, Continuing Resolutions and sequestration meant that the Lab operated for most of the year with incomplete funding information. This funding uncertainty, combined with the need to manage costs carefully, made planning for research, operations and key initiatives more complex. The Lab employed a dual strategy, applying targeted cost management approaches to sustain research and core operations, while funding essential strategic initiatives to expand research programs and strengthen facilities and support to the Lab's scientific mission. By year-end FY2013, LBNL received a total of \$793 million in new funding, a six percent increase over FY2012 funding. Total spending was \$819 million, level with FY2012 spending.

Challenges create opportunities, and the Office of the Chief Financial Officer (OCFO) seized those opportunities to expand our contributions to the Lab, as described in the notable accomplishments below. We continued the strategic use of organizational transformation and talent development, process redesign, and leveraging of technology to provide practical and innovative solutions to the Laboratory Community.

OCFO Vision: High-value financial stewardship, services, and strategic solutions that contribute to the scientific mission of the Laboratory.

FY2013 was a productive and successful year for the Procurement and Property Department led by Becky Cornett. A firm commitment to continuous improvement and customer service resulted in implementation of new operating principles, guidelines and key initiatives that yielded distinct service improvements across the \$338M in procurement activity. Notable accomplishments include a more than 40% reduction in PCard and Purchase Order processing time, capture of \$27.6M in supplier-negotiated savings, and \$2.8M in property-related cost savings. The Procurement area also successfully completed a rigorous DOE peer review. These efforts resulted in a 96.9% customer satisfaction rating, a testament to the service improvement to the Laboratory community.

The OCFO Budget Office, led by Anne Moore, continued to provide funds management and analysis services for decision support across a wide range of areas. Initiatives spanned a variety of projects from support and communication during the government shutdown, to partnering with other Operations Divisions on a comprehensive budget evaluation exercise. The budget exercise provided information for critical decision-making in FY2013 and served as a basis for FY2014 planning, aiding the Operations Divisions in identifying total targeted reductions of five percent year-to-year. The Budget Office very ably supported management of the \$793M in funding, and \$205M in institutional spending.

The Field Operations Unit, led by Doug Goodman, provided essential budget formulation, execution, and decision support to the Laboratory. Major accomplishments included analysis and contingency planning throughout the FY2013 federal funding cycle; co-developing, with other OCFO business units, a new and effective encumbrance reporting mechanism, and providing technical expertise in designing new financial processes and services as part of the Financial Systems Modernization (F\$M) project. The Field Operations Unit supported Principal Investigators, Project Managers and Lab leadership in the management of more than 12,400 projects across the Lab.

The Office of Sponsored Projects and Industry Partnerships (OSPIP), led by Rick Inada, continued its partnership with the OCFO's Business Systems Analysis group and LBNL's Information Technology division to implement the new electronic Sponsored Research Administration (eSRA) system. eSRA streamlines and automates development and submittal of research proposals to sponsors. OSPIP also worked closely with divisions to implement innovative research funding solutions, including the first Master CRADA (Cooperative Research and Development Agreement) with CalCharge, LLC to facilitate collaboration in advanced battery technologies. OSPIP submitted over 700 proposals while negotiating 1,300 awards, helping scientists bring in \$131.5 million in sponsored research contract funding, a 14% increase over FY2012.





Chief Financial Officer's Statement Continued

Continuing its focus on transformation, the Controller's Office led by Rachelle Jeppson, consolidated from three departments to two: Business and Disbursement Services and Financial and Employee Accounting. The reorganization allowed for greater integration between work units and lower department costs. Over the year, the department processed over \$136M in sponsor receivables, \$330M in payroll and \$412M in vendor payments. Cross-functional partnerships, both internal and external to the Laboratory, have also been an area of focus that enhanced the Controller's Office support of the scientific divisions. In addition, the department continued to refine and enhance processes that leverage technology and electronic (paperless) workflows. These improvements will position the department to optimize business processes with the implementation of F\$M in FY2015.

Building on the OCFO vision, within OCFO Operations the focus was on expanding understanding of the Lab's research 'business model,' and further developing our talented staff. Townhall meetings focused on the Lab's science mission and the role the OCFO plays in every stage of a scientific project (planning and proposing, executing and closeout). We hosted distinguished Lab scientists who spoke about their research and our impact on their work. To support staff in providing exceptional value, we implemented clear, consistent and achievable performance standards.

The OCFO established a cross-functional team to implement a cohesive and comprehensive approach to meet the new DOE requirement to report fully burdened encumbrance data by June 2013. While

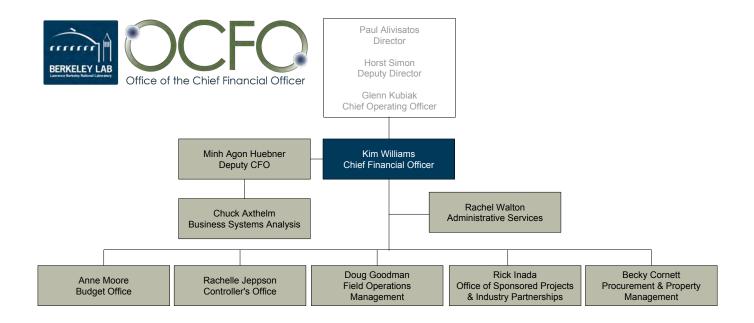
several aspects of the change were complex, of key concern was the potential impact on scientific project execution. The team analyzed the requirements, evaluated and modified processes, and developed system specifications managed by the Business Systems Analysis team that Chuck Axthelm leads. The changes were successfully implemented on time. In parallel, the team provided education and consultation to the Divisions to mitigate impacts to project execution.

The Financial Systems Modernization (F\$M) project team led by Minh Huebner, our Deputy CFO and Project Manager, completed several critical milestones in FY2013 in preparation for the launch of Phase IIA in FY2015. With our selected implementation partner, Accenture, cross-functional teams throughout the Laboratory completed the functional design of the system, organizational readiness plan, and detailed project plan. An organizational governance and stakeholder engagement model was established to ensure that the outcomes of this project meet the needs of the Laboratory community. An independent project review validated the project approach and indicated this phase of the project is tracking positively for successful execution.

Despite, or perhaps because of, the many challenges we faced, FY2013 was a year of significant accomplishment. As FY2014 began in the midst of a government shutdown, it's clear the financial complexities will continue. We in OCFO look forward to supporting the Lab in meeting these challenges and expanding our contributions to the scientific mission of the Lawrence Berkeley National Laboratory.

Sincerely, Kim Williams Chief Financial Officer

Office of the Chief Financial Officer

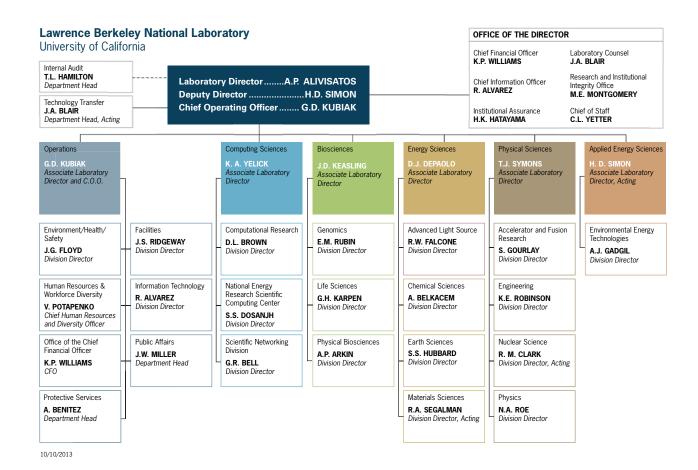






Organization

Lawrence Berkeley National Laboratory (LBNL), University of California



1. Institutional Information





Figure 1.1

Where Did Your Program Dollars Go in FY2013?

| | | LBNL Cost Break | down per Dollar | |
|-------------------------------------------|------------------------|----------------------------------|-------------------------------|-------------|
| Expenses | DOE Operating Costs | DOE Integrated Contractors Costs | Construction and Equipment | WFO Non-DOE |
| DIRECT | | | | |
| Direct Labor: | | | | |
| UC Labor (a) | \$0.34 | \$0.35 | \$0.14 | \$0.38 |
| Contract Labor | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Organization/ALD Burden (b) | \$0.05 | \$0.06 | \$0.03 | \$0.07 |
| Subtotal Direct Labor | \$0.40 | \$0.42 | \$0.17 | \$0.46 |
| Other Direct: | | | | |
| Services | \$0.22 | \$0.10 | \$0.51 | \$0.12 |
| Materials | \$0.09 | \$0.19 | \$0.24 | \$0.06 |
| Utilities | \$0.01 | \$0.00 | \$0.00 | \$0.01 |
| Other Expenses (c) (e) | \$0.00 | \$0.00 | \$0.00 | \$0.01 |
| Recharges (b) (d) (e) | \$0.03 | \$0.03 | \$0.01 | \$0.04 |
| Travel | \$0.02 | \$0.02 | \$0.00 | \$0.02 |
| Subtotal Other Direct | \$0.36 | \$0.35 | \$0.76 | \$0.25 |
| Total Direct | \$0.75 | \$0.76 | \$0.94 | \$0.71 |
| INDIRECT | , | | | |
| Procurement | \$0.01 | \$0.02 | \$0.01 | \$0.01 |
| Travel | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| G&A (Other Inst.) | \$0.23 | \$0.21 | \$0.05 | \$0.28 |
| Total Indirect | \$0.25 | \$0.24 | \$0.06 | \$0.29 |
| TOTAL EXPENSES | \$1.00 | \$1.00 | \$1.00 | \$1.00 |
| Note: Minor variances may occur due to re | unding. | | | |

Note: Minor variances may occur due to rounding.

- (a) UC Labor includes salary and benefits for Scientists/Engineers, Admin., Students/GSRA's and Campus Labor.
- (b) Distributed activities used by direct funded programs. ALD Burden implemented at beginning of FY2013.
- (c) Includes misc. expenses (stipends, sales tax, freight, etc.).
- (d) Includes recharges credited back to direct operating accounts such as ALS and ESnet.
- (e) Safeguards and Security funding moved from Environment/Health/Safety to Protective Services in FY2013.

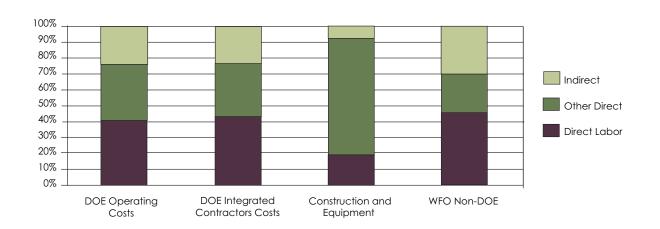


Table 1.1

Cost Trends by Expense Category, FY2009 - FY2013 (M and M of Total)

| F | FY2 | 2009 | FY2 | 010 | FY2 | 011 | FY2 | 012 | FY2 | 013 |
|-----------------------------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|
| Expenses | \$M | % |
| DIRECT | | | | | | | | | | |
| Direct Labor: | | | | | | | | | | |
| UC Labor (a) | 206.8 | 31.9% | 237.2 | 29.2% | 264.3 | 31.6% | 271.5 | 33.1% | 273.2 | 33.4% |
| Contract Labor | 1.9 | 0.3% | 1.4 | 0.2% | 1.1 | 0.1% | 0.8 | 0.1% | 0.7 | 0.1% |
| Organization/ALD Burden (b) | 33.0 | 5.1% | 37.1 | 4.6% | 40.0 | 4.8% | 41.3 | 5.0% | 42.4 | 5.2% |
| Subtotal Direct Labor | 241.7 | 37.3% | 275.7 | 34.0% | 305.5 | 36.5% | 313.6 | 38.3% | 316.4 | 38.6% |
| Other Direct: | | | | | | | | | | |
| Services | 140.7 | 21.7% | 203.3 | 25.1% | 213.6 | 25.5% | 182.6 | 22.3% | 183.3 | 22.4% |
| Materials | 78.3 | 12.1% | 120.6 | 14.9% | 86.6 | 10.4% | 88.9 | 10.9% | 79.0 | 9.6% |
| Utilities | 8.0 | 1.2% | 8.3 | 1.0% | 10.8 | 1.3% | 8.4 | 1.0% | 7.8 | 1.0% |
| Other Expenses (c) (e) | 4.0 | 0.6% | 4.5 | 0.6% | 5.6 | 0.7% | 5.7 | 0.7% | 3.4 | 0.4% |
| Recharges (b) (d) (e) | 14.1 | 2.2% | 14.3 | 1.8% | 15.6 | 1.9% | 20.3 | 2.5% | 22.8 | 2.8% |
| Travel | 9.3 | 1.4% | 11.7 | 1.4% | 12.9 | 1.5% | 13.1 | 1.6% | 12.5 | 1.5% |
| Subtotal Other Direct | 254.4 | 39.3% | 362.8 | 44.7% | 345.1 | 41.3% | 319.0 | 38.9% | 308.8 | 37.7% |
| Total Direct | 496.0 | 76.6% | 638.5 | 78.7% | 650.5 | 77.8% | 632.6 | 77.2% | 625.2 | 76.3% |
| INDIRECT | | | | | | | | | | |
| Procurement | 7.3 | 1.1% | 8.5 | 1.0% | 8.3 | 1.0% | 8.6 | 1.1% | 9.3 | 1.1% |
| Travel | 1.3 | 0.2% | 1.5 | 0.2% | 1.6 | 0.2% | 1.9 | 0.2% | 1.4 | 0.2% |
| G&A (Other Inst.) | 143.0 | 22.1% | 162.5 | 20.0% | 175.7 | 21.0% | 176.0 | 21.5% | 183.3 | 22.4% |
| Total Indirect | 151.7 | 23.4% | 172.5 | 21.3% | 185.6 | 22.2% | 186.5 | 22.8% | 194.1 | 23.7% |
| TOTAL EXPENSES | 647.7 | 100.0% | 811.1 | 100.0% | 836.1 | 100.0% | 819.1 | 100.0% | 819.2 | 100.0% |

Note: Minor variances may occur due to rounding.

⁽a) UC Labor includes salary and benefits for Scientists/Engineers, Admin., Students/GSRA's and Campus Labor.

⁽b) Distributed activities used by direct funded programs. ALD Burden implemented at beginning of FY2013.

⁽c) Includes misc. expenses (stipends, sales tax, freight, etc.).

⁽d) Includes recharges credited back to direct operating accounts such as ALS and ESnet.

⁽e) Safeguards and Security funding moved from Environment/Health/Safety to Protective Services in FY2013.





Table 1.2

Direct Cost Trends by Division, FY2009 - FY2013 (\$K)

| Division | FY2009 | FY2010 | FY2011 | FY2012 | FY2013 |
|-----------------------------------|---------|---------|---------|---------|---------|
| Accelerator & Fusion Research | 28,139 | 39,175 | 52,669 | 43,585 | 31,520 |
| Advanced Light Source | 49,662 | 57,656 | 63,453 | 70,357 | 74,850 |
| Chemical Sciences | 15,694 | 17,715 | 17,965 | 17,979 | 22,298 |
| Computing Sciences | 103,461 | 128,123 | 143,316 | 125,749 | 139,536 |
| Environmental Energy Technologies | 58,795 | 82,493 | 102,721 | 107,006 | 103,779 |
| Engineering | 8,306 | 5,929 | 4,014 | 3,524 | 4,934 |
| Environment/Health/Safety | 3,270 | 2,806 | 2,504 | 3,360 | 1,518 |
| Earth Sciences | 34,240 | 44,300 | 55,550 | 55,399 | 57,319 |
| Facilities | 43,839 | 64,299 | 36,450 | 37,843 | 36,455 |
| Genomics - JGI | 51,135 | 77,375 | 67,023 | 72,055 | 67,646 |
| Genomics | 6,208 | 5,994 | 6,360 | 5,951 | 7,419 |
| Information Technology | 3,100 | 3,380 | 3,570 | 2,781 | 2,081 |
| Life Sciences | 59,835 | 62,290 | 59,118 | 49,384 | 41,123 |
| Materials Sciences | 63,386 | 72,722 | 76,397 | 81,551 | 78,309 |
| Nuclear Science | 33,566 | 34,598 | 37,753 | 38,809 | 37,193 |
| Physical Biosciences | 52,015 | 66,258 | 65,928 | 61,986 | 62,076 |
| Physics | 32,139 | 44,751 | 40,219 | 40,633 | 48,283 |
| Protective Services (a) | - | - | - | - | 1,442 |
| Lab Directorate/Other | 903 | 1,112 | 991 | 1,088 | 1,394 |
| Other | 58 | 88 | 92 | 52 | 64 |
| DIVISION TOTAL | 647,749 | 811,062 | 836,095 | 819,093 | 819,242 |

Note: Minor variances may occur due to rounding.

(a) Safeguards and Security funding moved from Environment/Health/Safety to Protective Services in FY2013.

Table 1.2a

Costs by Direct Funding Source by Division, FY2013 (\$K)

| | | | | FY2013 | | | |
|--------------------------------------|------------------|-------------------------------------------|----------------|---------------------|-----------------------|-----------------------------|---------|
| Division | DOE Operating | DOE Integrated Contractors Costs | WFO Federal | WFO Non- Federal | Operating Subtotal | Capital and Equipment | Total |
| Accelerator & Fusion Research | 19,768 | 1,869 | 731 | 541 | 22,909 | 8,611 | 31,520 |
| Advanced Light Source | 61,368 | 91 | - | 963 | 62,422 | 12,428 | 74,850 |
| Chemical Sciences | 18,867 | 94 | 1,438 | 1,898 | 22,298 | - | 22,298 |
| Computing Sciences | 129,882 | 841 | 1,825 | 1,387 | 133,935 | 5,601 | 139,536 |
| Environmental Energy Technologies | 74,587 | 2,365 | 9,142 | 17,571 | 103,666 | 114 | 103,779 |
| Engineering | 128 | 2,232 | 950 | 1,073 | 4,382 | 552 | 4,934 |
| Environment/Health/Safety | 1,480 | - | - | - | 1,480 | 39 | 1,518 |
| Earth Sciences | 42,882 | 3,353 | 1,869 | 9,214 | 57,319 | - | 57,319 |
| Facilities | 938 | - | - | - | 938 | 35,517 | 36,455 |
| Genomics - JGI | 67,048 | - | - | 598 | 67,646 | - | 67,646 |
| Genomics | 1 | - | 4,894 | 2,525 | 7,419 | - | 7,419 |
| Information Technology | 1,931 | - | - | 150 | 2,081 | - | 2,081 |
| Life Sciences | 8,081 | - | 28,444 | 4,578 | 41,104 | 19 | 41,123 |
| Materials Sciences | 64,502 | 514 | 2,193 | 8,927 | 76,136 | 2,173 | 78,309 |
| Nuclear Science | 20,283 | 5,311 | 6,650 | 2,009 | 34,253 | 2,940 | 37,193 |
| Physical Biosciences | 51,280 | 453 | 3,797 | 5,731 | 61,261 | 815 | 62,076 |
| Physics | 47,155 | 300 | 604 | 149 | 48,209 | 74 | 48,283 |
| Protective Services (a) | 1,442 | - | - | - | 1,442 | - | 1,442 |
| Lab Directorate/Other | 1,345 | 49 | - | - | 1,394 | - | 1,394 |
| Other | - | 64 | - | - | 64 | - | 64 |
| Division Total | 612,968 | 17,537 | 62,538 | 57,315 | 750,359 | 68,882 | 819,242 |

Note: Minor variances may occur due to rounding.

(a) Safeguards and Security funding moved from Environment/Health/Safety to Protective Services in FY2013.





Table 1.2b

Costs by Direct Funding Source by Division, FY2012 (\$K)

| | | | | FY2012 | | | |
|-------------------------------------|------------------|-------------------------------------------|----------------|---------------------|-----------------------|-----------------------|---------|
| Division | DOE Operating | DOE Integrated Contractors Costs | WFO Federal | WFO Non- Federal | Operating Subtotal | Capital and Equipment | Total |
| Accelerator & Fusion Research | 24,493 | 1,115 | 1,768 | 490 | 27,867 | 15,718 | 43,585 |
| Advanced Light Source | 58,387 | 69 | - | 1,010 | 59,466 | 10,892 | 70,357 |
| Chemical Sciences | 17,302 | 49 | 312 | 315 | 17,979 | - | 17,979 |
| Computing Sciences | 119,388 | 2,142 | 2,724 | 1,232 | 125,485 | 264 | 125,749 |
| Environmental Energy Technologies | 74,951 | 2,841 | 10,011 | 18,512 | 106,315 | 691 | 107,006 |
| Engineering | 618 | 1,155 | 982 | 770 | 3,524 | - | 3,524 |
| Environment/Health/Safety | 2,501 | - | - | - | 2,501 | 859 | 3,360 |
| Earth Sciences | 39,490 | 2,005 | 2,740 | 11,164 | 55,399 | - | 55,399 |
| Facilities | 6,101 | - | - | - | 6,101 | 31,742 | 37,843 |
| Genomics - JGI | 70,069 | - | 4 | 676 | 70,749 | 1,306 | 72,055 |
| Genomics | 11 | - | 4,621 | 1,319 | 5,951 | - | 5,951 |
| Information Technology | 2,636 | - | - | 145 | 2,781 | - | 2,781 |
| Life Sciences | 10,581 | - | 33,245 | 4,943 | 48,769 | 616 | 49,384 |
| Materials Sciences | 67,192 | 102 | 3,221 | 8,529 | 79,044 | 2,507 | 81,551 |
| Nuclear Science | 26,821 | 2,679 | 5,185 | 1,283 | 35,969 | 2,840 | 38,809 |
| Physical Biosciences | 50,639 | 259 | 3,656 | 6,555 | 61,109 | 876 | 61,986 |
| Physics | 37,739 | 910 | 217 | 398 | 39,264 | 1,369 | 40,633 |
| Lab Directorate/Other | 1,030 | 58 | - | 0 | 1,088 | - | 1,088 |
| Other | - | 52 | - | - | 52 | - | 52 |
| Division Total | 609,950 | 13,437 | 68,687 | 57,340 | 749,413 | 69,680 | 819,093 |
| Note: Minor variances may occur due | to rounding. | | | | | | |

Table 1.2c

Costs by Direct Funding Source by Division, FY2011 (\$K)

| | FY2011 | | | | | | | | | |
|-----------------------------------|------------------|-------------------------------------------|----------------|---------------------|-----------------------|-----------------------|---------|--|--|--|
| Division | DOE Operating | DOE Integrated Contractors Costs | WFO Federal | WFO Non- Federal | Operating Subtotal | Capital and Equipment | Total | | | |
| Accelerator & Fusion Research | 21,528 | 1,055 | 1,781 | 977 | 25,341 | 27,328 | 52,669 | | | |
| Advanced Light Source | 51,267 | 137 | - | 879 | 52,283 | 11,170 | 63,453 | | | |
| Chemical Sciences | 15,068 | 120 | 2,042 | 45 | 17,275 | 691 | 17,965 | | | |
| Computing Sciences | 133,114 | 2,236 | 2,593 | 2,365 | 140,308 | 3,007 | 143,316 | | | |
| Information Technology | 2,400 | - | - | 154 | 2,554 | 1,016 | 3,570 | | | |
| Environmental Energy Technologies | 78,124 | 2,940 | 7,202 | 13,763 | 102,029 | 693 | 102,721 | | | |
| Engineering | 162 | 871 | 1,666 | 1,022 | 3,721 | 293 | 4,014 | | | |
| Environment/Health/Safety | 2,504 | - | - | - | 2,504 | - | 2,504 | | | |
| Earth Sciences | 39,342 | 1,962 | 2,754 | 10,565 | 54,622 | 928 | 55,550 | | | |
| Facilities | 8,362 | - | - | - | 8,362 | 28,088 | 36,450 | | | |
| Genomics | 134 | - | 4,673 | 1,553 | 6,360 | - | 6,360 | | | |
| Genomics - JGI | 63,172 | - | 132 | 757 | 64,061 | 2,962 | 67,023 | | | |
| Life Sciences | 10,656 | - | 38,878 | 9,110 | 58,644 | 474 | 59,118 | | | |
| Materials Sciences | 59,974 | 72 | 2,775 | 6,441 | 69,261 | 7,137 | 76,397 | | | |
| Nuclear Science | 22,392 | 1,826 | 3,680 | 937 | 28,834 | 8,919 | 37,753 | | | |
| Physical Biosciences | 52,004 | 325 | 3,562 | 6,013 | 61,904 | 4,024 | 65,928 | | | |
| Physics | 31,622 | 179 | 358 | 1,474 | 33,633 | 6,586 | 40,219 | | | |
| Lab Directorate/Other | 978 | 13 | - | 0 | 991 | - | 991 | | | |
| Other | - | 92 | - | - | 92 | - | 92 | | | |
| Division Total | 592,803 | 11,828 | 72,095 | 56,054 | 732,780 | 103,315 | 836,095 | | | |





Table 1.2d

Costs by Direct Funding Source by Division, FY2010 (\$K)

| | | | | FY2010 | | | |
|----------------------------------------|------------------|-------------------------------------------|----------------|---------------------|-----------------------|-----------------------|---------|
| Division | DOE Operating | DOE Integrated Contractors Costs | WFO Federal | WFO Non- Federal | Operating Subtotal | Capital and Equipment | Total |
| Accelerator & Fusion Research | 20,545 | 828 | 1,791 | 1,251 | 24,415 | 14,760 | 39,175 |
| Advanced Light Source | 49,856 | 185 | 0 | 1,659 | 51,700 | 5,955 | 57,656 |
| Chemical Sciences | 14,198 | 12 | 1,906 | 47 | 16,163 | 1,552 | 17,715 |
| Computing Sciences | 106,470 | 2,545 | 1,502 | 1,250 | 111,768 | 16,355 | 128,123 |
| Information Technology | 2,687 | - | - | 86 | 2,774 | 606 | 3,380 |
| Environmental Energy Technologies | 58,187 | 2,489 | 7,382 | 13,390 | 81,448 | 1,045 | 82,493 |
| Engineering | 221 | 977 | 2,770 | 1,152 | 5,120 | 808 | 5,929 |
| Environment/Health/Safety | 2,806 | 0 | - | - | 2,806 | - | 2,806 |
| Earth Sciences | 30,766 | 1,345 | 3,325 | 8,582 | 44,017 | 283 | 44,300 |
| Facilities | 20,275 | - | - | - | 20,275 | 44,023 | 64,299 |
| Genomics | 542 | - | 4,183 | 1,270 | 5,994 | - | 5,994 |
| Genomics - JGI | 70,087 | - | 121 | 1,555 | 71,762 | 5,612 | 77,375 |
| Life Sciences | 10,558 | - | 40,663 | 10,151 | 61,372 | 919 | 62,290 |
| Materials Sciences | 53,532 | 191 | 2,288 | 5,871 | 61,882 | 10,840 | 72,722 |
| Nuclear Science | 20,564 | 293 | 3,255 | 2,380 | 26,492 | 8,106 | 34,598 |
| Physical Biosciences | 51,004 | 942 | 4,433 | 6,180 | 62,560 | 3,699 | 66,258 |
| Physics | 28,840 | 1,091 | 149 | 1,359 | 31,439 | 13,311 | 44,751 |
| Lab Directorate/Other | 1,092 | 19 | - | - | 1,111 | - | 1,112 |
| Other | - | 88 | - | - | 88 | - | 88 |
| Division Total | 542,228 | 11,007 | 73,768 | 56,184 | 683,187 | 127,875 | 811,062 |
| Note: Minor variances may occur due to | o rounding. | | | | | | |

Table 1.2e

Costs by Direct Funding Source by Division, FY2009 (\$K)

| | | FY2009 | | | | | | | | | |
|-------------------------------------|------------------|-------------------------------------------|----------------|---------------------|-----------------------|-----------------------------|---------|--|--|--|--|
| Division | DOE Operating | DOE Integrated Contractors Costs | WFO Federal | WFO Non- Federal | Operating Subtotal | Capital and Equipment | Total | | | | |
| Accelerator & Fusion Research | 20,258 | 843 | 1,578 | 611 | 23,290 | 4,849 | 28,139 | | | | |
| Advanced Light Source | 45,784 | 38 | 0 | 806 | 46,628 | 3,034 | 49,662 | | | | |
| Chemical Sciences | 13,936 | 63 | 638 | 76 | 14,713 | 980 | 15,694 | | | | |
| Computing Sciences | 88,264 | 2,153 | 2,004 | 1,347 | 93,767 | 9,694 | 103,461 | | | | |
| Information Technology | 2,324 | - | - | 49 | 2,373 | 726 | 3,100 | | | | |
| Environmental Energy Technologies | 36,375 | 2,992 | 5,631 | 12,220 | 57,218 | 1,577 | 58,795 | | | | |
| Engineering | 2,995 | 779 | 1,225 | 206 | 5,205 | 3,101 | 8,306 | | | | |
| Environment/Health/Safety | 3,270 | 0 | - | - | 3,270 | - | 3,270 | | | | |
| Earth Sciences | 23,618 | 1,579 | 3,055 | 5,101 | 33,353 | 887 | 34,240 | | | | |
| Facilities | 9,391 | - | - | - | 9,391 | 34,448 | 43,839 | | | | |
| Genomics | 2,787 | - | 3,291 | 130 | 6,208 | - | 6,208 | | | | |
| Genomics - JGI | 46,567 | - | 349 | 1,275 | 48,192 | 2,943 | 51,135 | | | | |
| Life Sciences | 13,178 | - | 39,023 | 7,165 | 59,367 | 469 | 59,835 | | | | |
| Materials Sciences | 48,000 | 232 | 940 | 7,490 | 56,663 | 6,723 | 63,386 | | | | |
| Nuclear Science | 18,909 | 176 | 2,906 | 3,510 | 25,501 | 8,065 | 33,566 | | | | |
| Physical Biosciences | 42,366 | 1,034 | 3,699 | 4,611 | 51,709 | 306 | 52,015 | | | | |
| Physics | 23,160 | 1,067 | 415 | 215 | 24,857 | 7,283 | 32,139 | | | | |
| Lab Directorate/Other | 861 | 0 | - | 41 | 903 | - | 903 | | | | |
| Other | - | 58 | - | - | 58 | - | 58 | | | | |
| Division Total | 442,043 | 11,015 | 64,754 | 44,854 | 562,665 | 85,084 | 647,749 | | | | |
| Note: Minor variances may occur due | to rounding. | | | | | | | | | | |





Table 1.3

Indirect Budget Costs by Division, FY2013 (\$K)

| | Distribute | ed Suppor | t Costs | | | Inst | itutional Costs | | | |
|------------------------------------------|------------------------|---------------------------|--------------|--------|-------|--------|-----------------------|-----------------|------------------|--------------|
| Division/ALD | ALD/ Org. Burden | Service Centers (b) | Other (c) | LDRD | IGPP | G&A | Procurement Burden | Site Support | Travel Burden | Total (a) |
| Accelerator & Fusion Research | 1,852 | 104 | 245 | 1,443 | - | - | - | - | - | 3,643 |
| Advanced Light Source | 2,505 | - | - | 1,239 | - | - | - | - | - | 3,744 |
| Chief Financial Officer | - | - | - | - | - | 14,870 | 10,554 | - | 1,642 | 27,065 |
| Chemical Sciences | 1,473 | - | - | 2,691 | - | - | - | - | - | 4,164 |
| Computing Sciences | 5,918 | - | - | 2,788 | - | - | - | - | - | 8,705 |
| Environmental Energy Technologies | 6,171 | 2,182 | - | 2,477 | - | - | - | - | - | 10,830 |
| Engineering | 5,746 | 1,572 | - | 336 | - | 1,115 | - | 2,245 | - | 11,013 |
| Environment/Health/Safety | - | - | - | - | - | - | - | 23,005 | - | 23,005 |
| Earth Sciences | 4,318 | 133 | - | 2,498 | - | - | - | - | - | 6,948 |
| Facilities | 4,224 | 11,431 | - | - | 6,451 | - | 1,907 | 48,789 | - | 72,801 |
| Genomics | 591 | - | - | 234 | - | - | - | - | - | 825 |
| Genomics - JGI | - | 5,000 | - | 1,038 | - | - | - | - | - | 6,038 |
| Information Technology | 2,701 | 7,210 | - | - | - | 20,856 | 27 | 7,426 | 14 | 38,234 |
| Lab Directorate | - | - | - | - | - | 16,765 | - | - | - | 16,765 |
| Life Sciences | 4,402 | 772 | - | 2,600 | - | - | - | - | - | 7,775 |
| Materials Sciences | 3,882 | 259 | - | 2,002 | - | - | - | - | - | 6,143 |
| Nuclear Science | 1,838 | - | - | 740 | - | - | - | - | - | 2,576 |
| ALD for Operations | - | 5,103 | - | - | - | 15,435 | - | 918 | - | 21,456 |
| Physical Biosciences | 3,193 | 5,776 | - | 1,786 | - | - | - | - | - | 10,754 |
| Physics | 1,909 | - | - | 977 | - | - | - | - | - | 2,886 |
| Protective Services | - | - | - | - | - | - | - | 4,089 | - | 4,089 |
| Other (d) | - | - | - | - | - | 6,336 | - | - | - | 6,336 |
| Biosciences ALD | 926 | - | - | - | - | - | - | - | - | 926 |
| Energy and Environmental Sciences ALD | 573 | - | - | - | - | - | - | - | - | 573 |
| Computing Sciences ALD | 115 | - | - | _ | - | - | - | - | - | 115 |
| Division/ALD Total | 52,334 | 39,542 | 245 | 22,848 | 6,451 | 75,376 | 12,487 | 86,471 | 1,656 | 297,411 |

Note: Minor variances may occur due to rounding.

- (c) Includes: LBNL's Office of Homeland Security (formerly known as Nuclear Non-Proliferation).
- (d) Includes: UC Management Fee.

⁽a) Summation of indirect budget costs provided only to show magnitude of dollars being managed and does not equate to total indirect costs since there are overlaps between indirect budgets. For example, some organization burden costs are included in G&A and Recharges.

⁽b) Service Centers includes recharge cost centers that default to B&R YN01 (project type OHRCH) only and GSRA pass through cost.

Table 1.4

Average FTE Breakdown by Division, FY2013

| | | Direct Fu | nded FTEs | | Indirect Funded FTEs | | | | |
|---------------------------------------------|-------------------------|------------|---------------------|---------------------------|------------------------|---------------------------|-------------------------------|-----------------------------|------------|
| Division | DOE Operating (a) | WFO (b) | Capital & Equipment | Direct Funded Total | ALD/ Org. Burden | Service Centers (c) | Operations Overhead (d) | Indirect Funded Total | Total FTEs |
| Accelerator & Fusion Research | 64.6 | 3.9 | 28.3 | 96.7 | 9.9 | 0.3 | 6.4 | 16.6 | 113.3 |
| Advanced Light Source | 184.8 | 0.8 | 32.4 | 218.1 | 14.8 | - | 6.0 | 20.8 | 238.9 |
| Chief Financial Officer | 0.0 | - | - | 0.0 | - | - | 150.0 | 150.0 | 150.0 |
| Chemical Sciences | 72.7 | 9.4 | - | 82.1 | 8.2 | - | 13.8 | 22.1 | 104.2 |
| Computing Sciences | 183.1 | 8.8 | - | 191.9 | 36.6 | - | 11.4 | 48.0 | 239.9 |
| Environmental Energy Technologies | 211.9 | 84.2 | 0.4 | 296.5 | 36.6 | 16.1 | 11.2 | 63.9 | 360.5 |
| Engineering | 8.7 | 4.6 | 0.0 | 13.3 | 28.1 | 8.0 | 10.4 | 46.5 | 59.8 |
| Environmental/Health/ Safety | 2.8 | - | 0.1 | 2.9 | - | - | 104.3 | 104.3 | 107.2 |
| Earth Sciences | 154.6 | 36.2 | - | 190.8 | 21.4 | 0.6 | 10.7 | 32.7 | 223.5 |
| Facilities | 1.3 | - | 10.5 | 11.9 | 19.5 | 3.1 | 169.2 | 191.9 | 203.8 |
| Genomics | 0.0 | 25.5 | - | 25.5 | 3.8 | - | 1.9 | 5.7 | 31.2 |
| Genomics - JGI | 207.9 | 3.2 | - | 211.1 | (0.0) | 10.4 | 7.0 | 17.4 | 228.6 |
| Information Technology | 6.6 | - | - | 6.6 | 12.4 | 18.3 | 94.5 | 125.2 | 131.8 |
| Lab Directorate | 0.3 | - | - | 0.3 | - | - | 68.7 | 68.7 | 69.0 |
| Life Sciences | 30.9 | 114.2 | - | 145.2 | 30.8 | 5.3 | 14.4 | 50.5 | 195.6 |
| Materials Sciences | 239.3 | 42.2 | 0.0 | 281.6 | 18.8 | 1.4 | 11.3 | 31.6 | 313.1 |
| Nuclear Science | 85.2 | 31.2 | 1.7 | 118.1 | 12.5 | - | 3.9 | 16.3 | 134.5 |
| ALD for Operations | 2.6 | - | - | 2.6 | - | 10.1 | 92.0 | 102.1 | 104.7 |
| Physical Biosciences | 153.0 | 32.2 | 0.2 | 185.4 | 22.1 | 9.0 | 9.3 | 40.4 | 225.9 |
| Physics | 95.7 | 3.0 | 0.0 | 98.8 | 13.0 | - | 1.9 | 14.9 | 113.7 |
| Protective Services | 2.4 | - | - | 2.4 | - | - | 11.4 | 11.4 | 13.8 |
| Biosciences ALD | - | - | - | - | 2.9 | - | - | 2.9 | 2.9 |
| Energy and Environmental Sciences ALD | - | - | - | - | 2.6 | - | - | 2.6 | 2.6 |
| Computing Sciences ALD | - | - | - | - | 0.6 | - | - | 0.6 | 0.6 |
| Division Total | 1,708.6 | 399.5 | 73.8 | 2,181.9 | 294.6 | 82.7 | 809.7 | 1,187.0 | 3,368.8 |

Notes:

- Minor variances may occur due to rounding.
- FTEs are calculated based on translating labor hours charged into work-months and dividing by division's PLF factor.
- FTE calculation does not include Contract Labor or Campus Labor.
- Total FTE excludes 44.9 FTEs from non-contract projects (CSRUC, ILAs, Royalties, and UC Construction Projects).
- (a) DOE Operating includes DOE Integrated Contractors and Fellowships.
- (b) WFO includes CRADA.
- (c) Service Centers includes recharge cost centers that default to B&R YN01 (project type OHRCH) only.
- (d) Operations Overhead includes: G&A, LDRD, Site Support, Payroll Burden, Procurement, Travel, IGPP, S&S, and LBNL's Office of Homeland Security.





Table 1.5

Funds Held for Others Cost Trends, FY2009 - FY2013 (\$K)

| Funding Source | FY2009 | FY2010 | FY2011 | FY2012 | FY2013 |
|--------------------------------------------------------|--------|--------|--------|--------|--------|
| Royalty | 1,509 | 2,153 | 2,037 | 4,080 | 3,508 |
| Contractor-Funded Institutional Supporting R&D & Gifts | 2,839 | 2,894 | 2,615 | 2,948 | 3,164 |
| Inter-Location Appointments (ILA) | 3,478 | 3,233 | 3,033 | 3,689 | 2,198 |
| UC Construction Projects | 1,170 | 358 | 950 | 1,030 | 1,188 |
| Other | 98 | 5 | 58 | 78 | 79 |
| Total | 9,094 | 8,643 | 8,693 | 11,825 | 10,137 |

Note 1: FY2009-2012 figures have been restated to properly reflect cost trends by excluding gift assessment fees from Contractor-Funded Insitutional Supporting R&D and Gift, and UC questioned costs from Other.

Note 2: Decrease of (\$1.5M) from FY2012 to FY2013 in Inter-Location Appointments (ILA) is primarily due to the reduction of UC Berkeley awards for Computer Sciences (\$960K), Nuclear Sciences (\$248K) and Engineering (\$151K).

2. Direct Funding — DOE & Reimbursable Work





Total Laboratory Funding

Total Laboratory Funding - \$48M Increase

Total funding increased 6.5% to \$793M in FY2013 primarily due to increased funding from the DOE Offices of Environmental Management, Energy Efficiency and Renewable Energy and National Nuclear Security Administration.

| Туре | FY2012 (\$M) | FY2013 (\$M) | Delta (\$M) |
|-----------|--------------|--------------|-------------|
| Non- ARRA | \$740 | \$791 | \$50 |
| ARRA | \$5 | \$2 | \$(2) |
| Total | \$745 | \$793 | \$48 |

DOE Operating and Maintenance (O&M) Funding – \$45.7M, Increase

O&M funding provides for the execution of research and development (R&D) efforts, purchase of equipment, accelerator improvement projects and construction of general plant projects. Total funding increased by 8% in FY2013 due to increases in Energy Efficiency and Renewable Energy and various other DOE Offices.

Office of Science

Office of Science (SC) O&M funding increased slightly, \$8.3M or 2% in FY2013. The notable changes were:

- \$10.7M increase for the DesignForward project funded by Advanced Scientific Computing Research to accelerate the R&D of critical technologies needed for exa-scale computing.
- \$8M increase for the Sanford Underground Research Facility (SURF) in South Dakota funded by High Energy Physics for research in neutrino physics and dark matter research.
- \$5.5M decrease due to the discontinuation of the Fusion Energy Sciences Program.
- Energy Efficiency and Renewable Energy (EERE) O&M funding increased \$12.7M or 19% in FY2013. The notable changes were:
 - \$5.8M increase for the US/China Clean Energy Research Center and Commercial Buildings Integration funded by the Building Technologies Program.
 - \$4.1M increase for R&D of Emerging Technologies projects including; Lighting, Space Conditioning and Refrigeration and Windows Technology funded by the Building Technologies Program.
 - \$1.8M decrease due to the completion of ARRA funded Project Advanced Geothermal Systems with CO2 as Heat Transmission Fluid.

Other DOE

Funding from various other DOE programs in FY2013 accounted for a net increase of \$24.7M. The notable changes were:

- \$19.4M increase in operating funding for Old Town Decontamination and Decommissioning funded by Environmental Management Non-Defense Environmental Cleanup.
- \$4M increase for National Nuclear Security Administration (NNSA) - Office of Science collaboration for the DesignForward project funded by NNSA.
- \$3.5M increase for cost share of ESnet funded by NNSA.

DOE Construction Funding - \$13M Decrease

LBNL received no DOE Construction funds in FY2013 causing a year-to-year decrease because previously funded SC projects, Seismic Life Safety and Modernization and Replacement of General Purpose Buildings, Phase 2 were planned for completion in FY2013.

Other Direct Operating Funding – \$15.4M, Increase

Total Other Direct Operating funding increased \$15.4M or 12% to \$139.1M in FY2013. The increase was driven by additional funding received from Other Federal and Non-Federal sponsors.

Other Federal Sponsors

Other Federal Sponsors funding increased \$6.3M driven by the following major changes:

- \$4.1M increase in funding from Department of Defense (DOD) for an Innovator Award for R&D in cancer research.
- \$1.3M increase in funding from the Department of Homeland Security (DHS) for nuclear and radiological signal detection.
- \$1.6M net decrease in National Institutes of Health (NIH) funding.

Non-Federal Sponsors

Non-Federal Agencies funding increased \$4.3M driven by the following major change:

\$4.9 increase in funding from State and Local Governments and Non-Profit Organizations for various projects related to improving greenhouse gas emissions.

Total Laboratory Funding Continued

Work Performed for Other DOE Integrated Contractors
Work Performed for Other DOE Integrated Contractors
increased \$4.1M driven by the following major changes:

- \$2.2M increase in a subcontract from Oak Ridge National Laboratory to develop a Science and Implementation Plan for the Next Generation Ecosystem Experiments (NGEE) Project.
- \$1.8M increase in a subcontract from Brookhaven National Laboratory to collaborate on the STAR Heavy Flavor Tracker Project.

Total Laboratory Costs

Total Laboratory Costs - \$100K increase

Total costs were flat increasing only \$100K (less than 1%) from FY2012. American Recovery and Reinvestment Act (ARRA) costs continued to ramp down offset with a roughly equivalent increase in Non-ARRA spending.

| Type | FY2012 (\$M) | FY2013 (\$M) | Delta (\$M) |
|----------|--------------|--------------|-------------|
| Non-ARRA | \$754 | \$785 | \$30.3 |
| ARRA | \$65 | \$34 | (\$30.2) |
| Total | \$819 | \$819 | \$0.1 |

DOE Operating and Maintenance (O&M) Costs - \$1.3M, Decrease

Office of Science

Office of Science (SC) O&M costs were relatively flat, decreasing only \$300K or .1%. The notable year-to-year variances included:

- \$15.6M increase for the National Energy Research Scientific Computing Center (NERSC) funded by the Advanced Scientific Computing Research Program for completion of NERSC 6 lease, ramp-up of NERSC 7 and the NERSC relocation project
- \$6.0M decrease due to the demolition of Building 51 that was completed in FY2012 from Scientific Laboratory Infrastructure
- \$5.4M decrease for the SURF and 88-inch Cyclotron Facility funded by Nuclear Physics
- \$3.1M decrease for High Energy Density Laboratory Plasma Science for Inertial Fusion Energy funded by Fusion Energy Science

Office of Energy Efficiency and Renewable Energy Energy Efficiency and Renewable Energy (EERE) O&M costs decreased \$4M or 5%. The notable changes were:

- \$2.0M decrease for Vehicles Technologies in the Battery Programs and related capital equipment purchases
- \$1.5M decrease for LBNL's research contribution to other federal agencies energy efficiency programs in the Federal Energy Management Program
- \$1.2M decrease in spending on ARRA funded Geothermal Technologies Research and Development

Other DOE

Other DOE O&M costs increased \$2.9M or 9%. The notable change was:

 \$2.4M increase for DesignForward funded by National Nuclear Security Administration (NNSA) as part of the NNSA and SC collaboration for exa-scale computing

DOE Construction Costs \$3.6M, Increase

DOE Construction costs increased 9% to \$43M in FY2013, primarily due to the SC funded project Seismic Life-Safety, Modernization and Replacement of General Purpose Buildings, Phase 2 which will be completed in early-FY2014. Additionally, the increase reflects spending for the EERE funded project for the National User Test Bed Facility for Low-Energy Integrated Building Systems which will be completed in mid-FY2014.

Other Direct Operating Costs - \$2.1M, Decrease

Other Direct Operating Costs decreased 2% to \$137M





Total Laboratory Costs Continued

in FY2013, primarily due to a decrease in the Other Federal Agencies category of 9% or \$6M related primarily to National Institutes of Health and Department of Defense sponsored spending. This decrease was

offset by increases to DOE Integrated Contractor costs of \$4M or 30% for projects from Oak Ridge National Lab, Brookhaven National Lab, and SLAC National Accelerator Laboratory.

Data Sources for Tables in this section are as follows:

| Data Type | Source |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FY2013 Beginning Uncosted Obligations | Carryover Funding as provided in the LBNL final FY2012 Contract Modification |
| FY2013 Funds | Budget Authority as provided in the LBNL contract modification for the fiscal year |
| FY2013 Costs | LBNL published Year End Costs |
| FY2013 Ending Uncosted Obligations | DOE – Beginning Uncosted + Funds – Costs |
| | WFO – The sum of FY2013 Beginning Uncosted, FY2013 Funds and FY2013 Costs for the "Other Direct Operating" categories does not equal FY2013 Ending Uncosted Obligations due to various adjustments not reflected in the FY2013 Costs column. Examples of these adjustments include Bridge Funding, suspense items, and Federal Administrative Charge. The total of these adjustments for FY2013 is (\$-1,145K). |

Table 2.1

LBNL Funding Trends (BA) by Funding Source (\$K)

| Funding Srouce | FY2009 | FY2010 | FY2011 | FY2012 | FY2013 (a) |
|----------------------------------------------------------------|---------|---------|---------|---------|---------------|
| DOE DIRECT OPERATING | | | | | |
| Administrator for National Nuclear Security Administration | 5,863 | 7,082 | 6,204 | 7,009 | 14,399 |
| Advanced Research Projects Agency - Energy | 28 | 5,297 | - | 2,993 | 4,131 |
| Assistant Secretary for Energy Efficiency and Renewable Energy | 43,507 | 98,411 | 66,410 | 65,678 | 78,423 |
| Assistant Secretary for Environmental Management | 425 | 2,675 | 2,741 | 1,371 | 20,523 |
| Assistant Secretary for Fossil Energy | 10,668 | 13,750 | 7,297 | 8,316 | 5,215 |
| Assistant Secretary for Nuclear Energy | 825 | 1,545 | 3,104 | 2,877 | 2,930 |
| Assistant Secretary for Policy and International Affairs | 100 | 741 | 108 | 50 | 200 |
| Loan Programs Office | - | - | - | - | 15 |
| Office of Civilian Radioactive Waste Management | 35 | (1) | (2) | - | - |
| Office of Electricity Delivery and Energy Reliability | 7,427 | 10,042 | 7,998 | 8,743 | 8,485 |
| Office of Energy and Threat | 300 | (65) | - | 109 | 138 |
| Office of Health Safety and Security | 385 | 150 | 20 | 57 | 34 |
| Office of Legacy Management | - | - | - | - | 150 |
| Office of Management | - | - | 1 | - | - |
| Office of Science | 503,087 | 448,488 | 475,423 | 497,738 | 506,725 |
| Office of the Chief Information Officer | - | 460 | (137) | - | - |
| Total DOE Direct Operating | 572,649 | 588,576 | 569,167 | 594,941 | 641,370 |
| OTHER DIRECT OPERATING (b) | | | | | |
| Work for Other Federal Agencies | 56,474 | 68,928 | 68,960 | 56,401 | 62,667 |
| Work for Non-Federal Sponsors (c) | 48,816 | 58,998 | 50,240 | 53,460 | 57,737 |
| Cooperative Research and Development Agreements | 505 | 482 | 1,220 | 417 | 1,192 |
| Work for Other DOE Integrated Contractors (d) | 11,015 | 11,007 | 11,828 | 13,437 | 17,537 |
| Total Other Direct Operating | 116,810 | 139,413 | 132,249 | 123,716 | 139,132 |
| TOTAL OPERATING | 689,458 | 727,989 | 701,416 | 718,657 | 780,502 |

Note: Minor variances may occur due to rounding.

Data Source: Budget Authority as provided in the LBNL final contract modification for the fiscal year.

- (a) Includes funding for American Recovery and Reinvestment Act (ARRA):
 In FY2013 ARRA funds received were categorized as: Operating (\$2,315K) and Plant and Equipment (\$-1K). See Table 3.1 for details.
- (b) FY2010, FY2011, FY2012 and FY2013 ARRA National Institutes of Health (NIH) and National Science Foundation (NSF) awards were obligated to LBNL by DOE as work for a Non-Federal entity to accommodate OMB apportionment requirements for ARRA. For reporting consistency with prior and future years, all NIH and NSF funding and cost data is reflected under the Work for Other Federal Agencies category.
- (c) Includes funding for Non-Federal Sponsors who are precluded by law from paying an advance under the WN02 program.
- (d) Total funding for Work for Other Integrated Contractors is assumed to be equal to cost incurred.

continued...





Table 2.1

LBNL Funding Trends (BA) by Funding Source (\$K) Continued

| Funding Srouce | FY2009 | FY2010 | FY2011 | FY2012 | FY2013 (a) |
|----------------------------------------------------------------|---------|---------|---------|---------|---------------|
| DOE PLANT AND CAPITAL EQUIPMENT | | | | | |
| Basic Equipment/Major Items of Equipment | | | , | | |
| Administrator for National Nuclear Security Administration | 340 | - | 77 | - | (0) |
| Assistant Secretary for Energy Efficiency and Renewable Energy | 65 | 8,482 | 1,200 | - | - |
| Office of Science | 132,728 | 53,902 | 34,904 | 10,612 | 11,081 |
| Total DOE Capital Equipment | 133,133 | 62,384 | 36,181 | 10,612 | 11,080 |
| GENERAL PLANT PROJECTS | | | | | |
| Office of Science | 16,233 | 1,499 | 1,032 | - | 1,250 |
| ACCELERATOR IMPROVEMENT PROJECTS | | | | | |
| Office of Science | 13,255 | 5,320 | 2,300 | 3,000 | 550 |
| LINE-ITEM CONSTRUCTION | | , | , | | |
| Assistant Secretary for Energy Efficiency and Renewable Energy | - | 15,700 | - | - | - |
| Office of Science | 56,158 | 34,025 | 20,063 | 12,972 | (2) |
| Total DOE Plant | 85,646 | 56,544 | 23,395 | 15,972 | 1,798 |
| TOTAL DOE PLANT AND CAPITAL EQUIPMENT | 218,779 | 118,928 | 59,576 | 26,584 | 12,878 |
| TOTAL LABORATORY | 908,237 | 846,917 | 760,992 | 745,241 | 793,380 |
| Note: Minor variances may occur due to rounding. | ' | | | ' | |

Data Source: Budget Authority as provided in the LBNL final contract modification for the fiscal year.

Table 2.2

LBNL Cost Trends by Funding Source (\$K)

| Funding Source | FY2009 | FY2010 | FY2011 | FY2012 | FY2013 (a) |
|-------------------------------------------------------------------|---------|---------|---------|---------|------------|
| DOE DIRECT OPERATING | | | | | ı |
| Administrator for National Nuclear Security Administration | 5,853 | 7,232 | 6,105 | 7,026 | 9,310 |
| Advanced Research Projects Agency - Energy | 13 | 30 | 1,966 | 2,517 | 3,651 |
| Assistant Secretary for Energy Efficiency and Renewable Energy | 28,387 | 57,400 | 78,939 | 71,739 | 68,584 |
| Assistant Secretary for Environmental Management | 341 | 1,969 | 3,251 | 1,842 | 2,138 |
| Assistant Secretary for Fossil Energy | 6,840 | 6,969 | 11,182 | 9,624 | 9,817 |
| Assistant Secretary for Nuclear Energy | 964 | 1,485 | 2,733 | 3,091 | 3,072 |
| Assistant Secretary for Policy and International Affairs | 66 | 96 | 685 | 98 | 76 |
| Loan Programs Office | - | - | - | - | 15 |
| Office of Civilian Radioactive Waste Management | 222 | 39 | 4 | - | - |
| Office of Electricity Delivery and Energy Reliabiltiy | 6,015 | 7,353 | 6,676 | 8,470 | 7,479 |
| Office of Energy and Threat | - | 38 | 158 | 132 | 164 |
| Office of Health Safety and Security | 390 | 281 | 31 | 37 | 40 |
| Office of Science | 392,951 | 459,035 | 481,048 | 505,375 | 508,623 |
| Office of the Chief Information Officer | - | 299 | 24 | - | - |
| Total DOE Direct Operating | 442,043 | 542,228 | 592,803 | 609,950 | 612,968 |
| OTHER DIRECT OPERATING (b) | | | | | |
| Work for Other Federal Agencies | 64,754 | 73,768 | 72,095 | 68,687 | 62,538 |
| Work for Non-Federal Sponsors (c) | 44,604 | 55,399 | 55,558 | 56,360 | 56,111 |
| Cooperative Research and Development Agreements | 250 | 785 | 496 | 980 | 1,204 |
| Work for Other DOE Integrated Contractors | 11,015 | 11,007 | 11,828 | 13,437 | 17,537 |
| Total Other Direct Operating (d) | 120,622 | 140,959 | 139,977 | 139,464 | 137,391 |
| TOTAL OPERATING | 562.665 | 683,187 | 732.780 | 749,413 | 750,359 |

Note: Minor variances may occur due to rounding.

Data Source: LBNL published Fiscal Year End Costs.

- (a) Includes funding for American Recovery and Reinvestment Act (ARRA):
 - In FY2013 ARRA costs were colored as: Operating (\$22,056K), Plant and Equipment (\$12,474K). See Table 3.2 for details.
- (b) In FY2010, FY2011, FY2012 and FY2013 ARRA National Institutes of Health (NIH) and National Science Foundation (NSF) awards were obligated to LBNL by DOE as work for a Non-Federal entity to accommodate OMB apportionment requirements for ARRA. For reporting consistency with prior and future years, all NIH and NSF funding and cost data is reflected under the Work for Other Federal Agencies category.
- (c) Includes funding for Non-Federal Sponsors who are precluded by law from paying an advance under the WN02 program.
- (d) FY2013 Costs do not include various adjustments. Examples of these adjustments include bridge funding, suspense items and Federal Administrative Charge. The total of these adjustments for FY2013 is (\$-1,145K).

continued...





Table 2.2

LBNL Cost Trends by Funding Source (\$K) Continued

| Funding Source | FY2009 | FY2010 | FY2011 | FY2012 | FY2013 (a) |
|-------------------------------------------------------------------|---------|---------|---------|---------|------------|
| DOE PLANT AND CAPITAL EQUIPMENT | | - | , | | |
| Basic Equipment/Major Items of Equipment | | | | | |
| Administrator for National Nuclear Security Administration | 1,331 | 159 | 140 | - | - |
| Assistant Secretary for Energy Efficiency and Renewable Energy | 1,070 | 870 | 5,372 | 1,567 | 742 |
| Office of Science | 46,645 | 80,815 | 64,165 | 28,306 | 24,773 |
| Total DOE Capital Equipment | 49,045 | 81,844 | 69,677 | 29,874 | 25,515 |
| | | | | | |
| GENERAL PLANT PROJECTS | | | | | |
| Office of Science | 5,098 | 11,853 | 454 | 3,220 | 1,769 |
| ACCELERATOR IMPROVEMENT PROJECTS | | ' | , | | |
| Office of Science | 1,268 | 1,865 | 5,444 | 6,985 | 6,622 |
| LINE-ITEM CONSTRUCTION | | ' | ' | | |
| Assistant Secretary for Energy Efficiency and Renewable Energy | - | 91 | 1,151 | 2,036 | 8,262 |
| Office of Science | 29,673 | 32,223 | 26,589 | 27,565 | 26,715 |
| Total DOE Plant | 36,039 | 46,031 | 33,638 | 39,807 | 43,368 |
| | | | ' | | |
| TOTAL DOE PLANT AND CAPITAL EQUIPMENT | 85,084 | 127,875 | 103,315 | 69,680 | 68,882 |
| | , , | | | | |
| TOTAL LABORATORY | 647,749 | 811,062 | 836,095 | 819,093 | 819,242 |

Note: Minor variances may occur due to rounding.

Data Source: LBNL published Fiscal Year End Costs.

In FY2013 ARRA costs were colored as: Operating (\$22,056K), Plant and Equipment (\$12,474K). See Table 3.2 for details.

⁽a) Includes funding for American Recovery and Reinvestment Act (ARRA):

Table 2.3

LBNL Funding and Costs by Funding Source (\$K)

| LBNL FY2013 Funding and Cost by Source (\$K) | FY2013 Beginning Uncosted Obligations | FY2013 Funds | FY2013 Costs | FY2013 Ending Uncosted Obligations |
|----------------------------------------------------------------|---------------------------------------|-----------------|-----------------|---------------------------------------------|
| DOE DIRECT OPERATING | | | | |
| Administrator for National Nuclear Security Administration | 3,063 | 14,399 | 9,310 | 8,153 |
| Advanced Research Projects Agency - Energy | 3,792 | 4,131 | 3,651 | 4,272 |
| Assistant Secretary for Energy Efficiency and Renewable Energy | 56,452 | 78,423 | 68,584 | 66,291 |
| Assistant Secretary for Environmental Management | 780 | 20,523 | 2,138 | 19,164 |
| Assistant Secretary for Fossil Energy | 14,618 | 5,215 | 9,817 | 10,016 |
| Assistant Secretary for Nuclear Energy | 703 | 2,930 | 3,072 | 561 |
| Assistant Secretary for Policy and International Affairs | 118 | 200 | 76 | 242 |
| Loan Programs Office | - | 15 | 15 | 0 |
| Office of Electricity Delivery And Energy Reliability | 11,593 | 8,485 | 7,479 | 12,599 |
| Office of Energy and Threat | 80 | 138 | 164 | 54 |
| Office of Health Safety and Security | 28 | 34 | 40 | 22 |
| Office of Legacy Management | - | 150 | - | 150 |
| Office of Management | 1 | - | - | 1 |
| Office of Science | 225,240 | 506,725 | 508,623 | 223,343 |
| Total DOE Direct Operating | 316,466 | 641,370 | 612,968 | 344,867 |
| OTHER DIRECT OPERATING (a) | | | | |
| Work for Other Federal Agencies | 51,937 | 62,667 | 62,538 | 52,754 |
| Work for Non-Federal Sponsors (b) | 26,008 | 57,737 | 56,111 | 28,038 |
| Cooperative Research and Development Agreements | 515 | 1,192 | 1,204 | 553 |
| Work for Other DOE Integrated Contractors (c) | - | 17,537 | 17,537 | - |
| Total Other Direct Operating (d) | 78,459 | 139,132 | 137,391 | 81,345 |
| | | | | |
| TOTAL OPERATING | 394,925 | 780,502 | 750,359 | 426,212 |

Note: Minor variances may occur due to rounding.

- (a) ARRA National Institutes of Health (NIH) and National Science Foundation (NSF) awards were obligated to LBNL by DOE as work for a Non-Federal entity to accommodate OMB apportionment requirements for ARRA. For reporting consistency with prior and future years, all NIH and NSF funding and cost data is reflected under the Work for Other Federal Agencies category.
- (b) Includes funding for Non-Federal Sponsors who are precluded by law from paying an advance under the WN02 program.
- (c) Total funding for Work for Other Integrated Contractors is assumed to be equal to cost incurred.
- (d) The sum of FY2013 Beginning Uncosted Obligations and FY2013 Funds minus FY2013 Costs does not equal FY2013 Ending Uncosted Obligations due to various adjustments not reflected in the FY2013 Costs column. Examples of these adjustments include bridge funding, suspense items, and Federal Administrative Charge. The total of these adjustments for FY2013 is (\$-1,145K).

continued...





Table 2.3

LBNL Funding and Costs by Funding Source (\$K) Continued

| LBNL FY2013 Funding and Cost by Source (\$K) | FY2013 Beginning Uncosted Obligations | FY2013 Funds | FY2013 Costs | FY2013 Ending Uncosted Obligations |
|----------------------------------------------------------------|---------------------------------------|-----------------|-----------------|---------------------------------------------|
| DOE PLANT AND EQUIPMENT | | | | |
| Basic Equipment/Major Items of Equipment | | | | |
| Administrator for National Nuclear Security Administration | 0 | (0) | - | - |
| Assistant Secretary for Energy Efficiency and Renewable Energy | 742 | - | 742 | 0 |
| Office of Science | 39,495 | 11,081 | 24,773 | 25,803 |
| Total Capital Equipment | 40,238 | 11,080 | 25,515 | 25,804 |
| General Plant Projects | | | | |
| Office of Science | 1,669 | 1,250 | 1,769 | 1,150 |
| Accelerator Improvement Projects | | | | |
| Office of Science | 10,897 | 550 | 6,622 | 4,825 |
| Line-Item Construction | | | | |
| Assistant Secretary for Energy Efficiency and Renewable Energy | 12,422 | - | 8,262 | 4,161 |
| Office of Science | 30,424 | (2) | 26,715 | 3,707 |
| Total DOE Plant | 55,413 | 1,798 | 43,368 | 13,843 |
| TOTAL DOE PLANT AND CAPITAL EQUIPMENT | 95,650 | 12,878 | 68,882 | 39,646 |
| TOTAL LABORATORY (e) | 490,576 | 793,380 | 819,242 | 465,858 |

Note: Minor variances may occur due to rounding.

In FY2013 ARRA costs were colored as: Operating (\$2,315K, \$22,056K) and Plant and Equipment (\$-1K, \$12,474K). See Table 3.1 and Table 3.2 for details.

⁽e) Includes American Recovery and Reinvestment Act (ARRA):

Table 2.4

FY2013 Funding and Costs by DOE Programs (\$K)

| A | DMINSTRATOR FOR NATIONAL NUCLEAR SECURITY ADMINISTRATION | FY2013 Beginning Uncosted Obligations | FY2013 Funds | FY2013 Costs | FY2013 Ending Uncosted Obligations |
|---------|---------------------------------------------------------------|---------------------------------------|-----------------|-----------------|---------------------------------------------|
| OPERA: | TING | | | | |
| DP15 | Advanced Simulation and Computing Campaign | 6 | 4,000 | 5 | 4,001 |
| FS21 | Field Security - Cyber Security | 250 | (30) | 219 | 0 |
| NN20 | Nonproliferation And Verification Research And Development | 2,598 | 5,870 | 5,732 | 2,736 |
| NN40 | Nonproliferation and International Security | 210 | 1,026 | 983 | 252 |
| MO01 | NNSA CIO Activities - Cyber Security | - | 3,534 | 2,370 | 1,164 |
| Total O | perating | 3,063 | 14,399 | 9,310 | 8,153 |
| | L EQUIPMENT: | I | Г | | |
| NN20 | Nonproliferation And Verification Research And Development | 0 | (0) | - | - |
| Total C | apital Equipment | 0 | (0) | - | - |
| TOT | AL ADMINISTRATOR FOR NATIONAL NUCLEAR SECURITY ADMINISTRATION | 3,063 | 14,399 | 9,310 | 8,153 |
| Note: / | Minor variances may occur due to rounding. | | | | |

continued...





Table 2.4a

FY2013 Funding and Costs by DOE Programs (\$K) Continued

| | OFFICE OF SCIENCE | FY2013 Beginning Uncosted Obligations | FY2013 Funds | FY2013 Costs | FY2013 Ending Uncosted Obligations | | |
|---------------------|----------------------------------------------------------------|---------------------------------------|-----------------|-----------------|---------------------------------------------|--|--|
| OPERATING | | | | | | | |
| AT50 | FES - Science | 2,069 | 4 | 2,019 | 54 | | |
| FS10 | Safeguards and Security - Science | 2,456 | 3,767 | 4,653 | 1,570 | | |
| KA11 | Proton Accelerator-Based Physics (a) | 56 | - | 10 | 46 | | |
| KA13 | Non-Accelerator-Based Physics (a) | 26 | (1) | 24 | 2 | | |
| KA14 | Theoretical Physics (a) | 2,323 | (100) | 1,252 | 971 | | |
| KA15 | Advanced Technology R&D (prior to restructure) (a) | 379 | (O) | 373 | 6 | | |
| KA21 | Energy Frontier Experimental Physics (a) | 4,274 | 8,365 | 7,946 | 4,693 | | |
| KA22 | Intensity Frontier Experimental Physics (a) | 2,991 | 18,795 | 18,665 | 3,121 | | |
| KA23 | Cosmic Frontier Experimental Physics (a) | 5,718 | 11,460 | 11,773 | 5,405 | | |
| KA24 | Theoretical and Computational Physics (a) | 1,291 | 4,870 | 3,933 | 2,228 | | |
| KA25 | Advanced Technology R&D (a) | 5,615 | 16,849 | 16,629 | 5,835 | | |
| KA26 | Accelerator Stewardship (a) | - | 30 | - | 30 | | |
| KB01 | Medium Energy Physics | 102 | 591 | 518 | 175 | | |
| KB02 | Heavy-Ion Physics | 3,016 | 5,211 | 4,886 | 3,340 | | |
| KB03 | Nuclear Theory | 2,942 | 2,294 | 3,378 | 1,857 | | |
| KB04 | Low Energy Physics | 3,861 | 10,256 | 10,869 | 3,248 | | |
| KC02 | Materials Sciences and Engineering | 13,967 | 28,944 | 27,595 | 15,316 | | |
| KC03 | Chemical Sciences, Geosciences, and Energy Biosciences | 29,918 | 44,186 | 41,322 | 32,781 | | |
| KC04 | Scientific User Facilities | 20,734 | 83,663 | 88,343 | 16,054 | | |
| KG06 | Excess Facilities Disposition | 0 | (0) | - | - | | |
| KJ01 | Mathematical, Information, And Computational Sciences | 24 | (24) | - | - | | |
| KJ04 | Mathematical, Computational, and Computer Sciences Research | 28,157 | 26,430 | 23,658 | 30,929 | | |
| KJ05 | High Performance Computing and Network Facilities | 47,829 | 104,184 | 102,018 | 49,995 | | |
| KL02 | Educator Programs (a) | 0 | (0) | - | - | | |
| KL10 | Internships and Visiting Faculty Activities at DOE Labs (a) | 470 | 1,507 | 1,327 | 650 | | |
| KL11 | Fellowships (a) | - | 15 | 13 | 2 | | |
| KP11 | Life Sciences | 4 | (1) | 1 | 3 | | |
| KP12 | Climate Change Research | 202 | (0) | 124 | 77 | | |
| KP13 | Environmental Remediation | 0 | (0) | - | - | | |
| KP15 | Biological Research | 422 | (3) | 223 | 196 | | |
| KP16 | Biological Systems Science | 34,579 | 116,130 | 119,532 | 31,177 | | |
| KP17 | Climate and Environmental Sciences | 11,813 | 19,305 | 17,535 | 13,583 | | |
| Total Operating (a) | | 225,240 | 506,725 | 508,623 | 223,343 | | |

⁽a) FY2013 Funds for High Energy Physics (Budget and Reporting Codes beginning with KA) and Workforce for Teachers and Scientists (Budget and Reporting Codes beginning with KL) were shifted at the 4 digit Budget and Reporting Code level from the FY2013 Funds column (Budget Authority) to FY2013 Beginning Uncosted Obligations due to DOE realignment. Therefore, FY2012 Ending Uncosted Obligations do not equal FY2013 Beginning Uncosted Obligations. Net effect is zero.

FY2013 Funding and Costs by DOE Programs (\$K) Continued

| | OFFICE OF SCIENCE (Continued) | FY2013 Beginning Uncosted Obligations | FY2013 Funds | FY2013 Costs | FY2013 Ending Uncosted Obligations | |
|-----------------------------|--------------------------------------------------------|---------------------------------------|-----------------|-----------------|---------------------------------------------|--|
| CAPITAL EQUIPMENT | | | | | | |
| AT50 | FES - Science | 1 | (1) | - | - | |
| KA11 | Proton Accelerator-Based Physics (a) | 1,138 | (440) | 571 | 127 | |
| KA13 | Non-Accelerator-Based Physics (a) | 76 | (0) | 74 | 1 | |
| KA15 | Advanced Technology R&D (prior to restructure) (a) | 462 | (1) | 438 | 23 | |
| KA22 | Intensity Frontier Experimental Physics (a) | - | 1,987 | 187 | 1,801 | |
| KA25 | Advanced Technology R&D (a) | 3,135 | 2,950 | 5,582 | 504 | |
| KB02 | Heavy-Ion Physics | 140 | (140) | - | - | |
| KB04 | Low Energy Physics | 5,350 | 1,400 | 2,940 | 3,810 | |
| KC02 | Materials Sciences and Engineering | 4,304 | (300) | 2,083 | 1,920 | |
| KC03 | Chemical Sciences, Geosciences, and Energy Biosciences | 2,482 | (573) | 1,409 | 500 | |
| KC04 | Scientific User Facilities | 7,499 | 6,400 | 5,888 | 8,011 | |
| KJ01 | Mathematical, Information, And Computational Sciences | 31 | (31) | - | - | |
| KJ05 | High Performance Computing and Network Facilities | 12,180 | (170) | 5,601 | 6,409 | |
| KP11 | Life Sciences | 0 | (0) | - | - | |
| KP15 | Biological Research | 0 | (0) | - | - | |
| KP16 | Biological Systems Science | 2,697 | - | - | 2,697 | |
| Total Capital Equipment (b) | | 39,495 | 11,081 | 24,773 | 25,803 | |

Note: Minor variances may occur due to rounding.

(b) Includes Institutional General Purpose Fauipment activity.

| (b) Inclu | ides Institutional General Purpose Equipment activity. | | | | |
|----------------------------------------|--------------------------------------------------------|---------|---------|---------|---------|
| GENERA | L PLANT PROJECTS | | | | |
| FS10 | Safeguards and Security - Science | 41 | 1,100 | 39 | 1,102 |
| KA11 | Proton Accelerator-Based Physics | 13 | - | - | 13 |
| KC04 | Scientific User Facilities | 1,074 | 150 | 1,190 | 34 |
| KG09 | General Plant Projects | 541 | - | 541 | 0 |
| Total Ge | eneral Plant Projects | 1,669 | 1,250 | 1,769 | 1,150 |
| ACCELE | RATOR IMPROVEMENT PROJECTS | | | | |
| KB04 | Low Energy Physics | 0 | - | - | 0 |
| KC02 | Materials Sciences and Engineering | 4,235 | - | 4,235 | 0 |
| KC04 | Scientific User Facilities | 6,662 | 550 | 2,387 | 4,825 |
| Total Accelerator Improvement Projects | | 10,897 | 550 | 6,622 | 4,825 |
| LINE-ITE | M CONSTRUCTION | | | | |
| 39KG | Science Laboratories Infrastructure | 30,424 | (2) | 26,715 | 3,707 |
| Total Line-item Construction | | 30,424 | (2) | 26,715 | 3,707 |
| TOTAL D | OE PLANT | 42,990 | 1,798 | 35,106 | 9,682 |
| TOTAL C | OFFICE OF SCIENCE | 307,726 | 519,604 | 568,502 | 258,828 |
| | Ainor variances may occur due to rounding. | 337,720 | , | , | |

⁽a) FY2013 Funds for High Energy Physics (Budget and Reporting Codes beginning with KA) and Workforce for Teachers and Scientists (Budget and Reporting Codes beginning with KL) were shifted at the 4 digit Budget and Reporting Code level from the FY2013 Funds column (Budget Authority) to FY2013 Beginning Uncosted Obligations due to DOE realignment. Therefore, FY2012 Ending Uncosted Obligations do not equal FY2013 Beginning Uncosted Obligations. Net effect is zero.





Table 2.4b

FY2013 Funding and Costs by DOE Programs (\$K) Continued

| ASS | ISTANT SECRETARY FOR ENERGY EFFICIENCY AND RENEWABLE ENERGY | FY2013 Beginning Uncosted Obligations | FY2013 Funds | FY2013 Costs | FY2013 Ending Uncosted Obligations |
|--------|---------------------------------------------------------------|---------------------------------------|-----------------|-----------------|---------------------------------------------|
| OPERA: | TING | | | | |
| BM01 | Biomass/Biofuels Energy Systems | 3,793 | 4,018 | 3,244 | 4,566 |
| BR01 | EE Departmental Admin, Rec Act | 2,146 | - | 537 | 1,608 |
| BTO1 | Residential Buildings Integration | 2,818 | 1,817 | 3,539 | 1,096 |
| BT02 | Commercial Buildings Integration | 7,321 | 9,742 | 5,430 | 11,632 |
| BT03 | Emerging Technologies | 3,674 | 10,697 | 8,252 | 6,119 |
| BTO4 | Equipment and Buildings Standards | 10,572 | 15,162 | 12,917 | 12,817 |
| BT07 | Technology Validation and Market Introduction | 903 | (0) | 868 | 35 |
| EB21 | Solar Energy | 669 | - | 523 | 146 |
| EB25 | Wind Energy Systems | 254 | (1) | 243 | 11 |
| EB36 | Facilities and Infrastructure | 5 | - | - | 5 |
| EB40 | Geothermal Technologies | 5,706 | - | 3,503 | 2,204 |
| EB42 | Hydrogen Research R&D | 302 | (0) | 161 | 141 |
| EB51 | Energy Efficiency and Renewable Energy Program Direction | 2,516 | (0) | 1,001 | 1,515 |
| EB55 | Department Energy Management Program | 27 | (27) | - | - |
| EB57 | Energy Efficiency and Renewable Energy (EERE) Program Support | 869 | - | 652 | 217 |
| ED18 | Industries Of The Future (Specific) | 0 | (0) | - | - |
| ED19 | Industries Of The Future (Crosscutting) | 213 | (0) | 113 | 100 |
| ED20 | Industrial Technical Assistance | 907 | 1,438 | 1,563 | 782 |
| ED27 | Next Generation Manufacturing Processes | 65 | - | 65 | 0 |
| ED28 | Next Generation Materials | 249 | - | 63 | 186 |
| EL17 | Federal Energy Management Program | 2,575 | 3,701 | 3,371 | 2,905 |
| GT01 | Enhanced Geothermal Systems | - | 4,265 | 687 | 3,578 |
| GT03 | Innovative Exploration Technologies | - | 1,134 | 23 | 1,111 |
| HT01 | Fuel Cell Systems R&D | 1,561 | 3,021 | 3,027 | 1,556 |
| HT02 | Hydrogen Fuel R&D | 327 | 900 | 743 | 485 |
| HT07 | Manufacturing R&D | 21 | 75 | 67 | 29 |
| PG03 | Strategic Priorites and Impact Analysis | 485 | 875 | 440 | 920 |
| PG05 | International | 75 | 555 | 339 | 291 |
| SL01 | Concentrating Solar Power | - | 232 | - | 232 |
| SL02 | Photovoltaic R&D | - | 1,028 | 390 | 638 |
| SL04 | Market Transformation (Standards/Operability/Training) | - | 1,597 | 886 | 711 |
| VT02 | Outreach, Deployment & Analysis | 18 | - | (5) | 23 |
| VT03 | Hybrid and Electric Propulsion | 0 | (0) | 0 | 0 |
| VT05 | Materials Technology | 74 | 248 | 286 | 36 |
| VT11 | Hybrid Electric Systems | 21 | - | 16 | 5 |
| VT12 | Batteries and Electric Drive Technology | 6,687 | 15,884 | 14,200 | 8,371 |
| WI03 | State Energy Program (Grants) | 418 | 835 | 279 | 973 |
| WI04 | Other State Energy Activities | 171 | (0) | 111 | 60 |

continued...

Table 2.4b

| ASSI | ISTANT SECRETARY FOR ENERGY EFFICIENCY AND RENEWABLE ENERGY | FY2013 Beginning Uncosted Obligations | FY2013 Funds | FY2013 Costs | FY2013 Ending Uncosted Obligations |
|--------------|--------------------------------------------------------------------------|---------------------------------------|-----------------|-----------------|---------------------------------------------|
| WI05 | Gateway Deployment | 3 | - | 3 | 0 |
| WI06 | Intergovernmental Activities | 277 | (0) | 125 | 151 |
| WI07 | Weatherization Assistance Program | 729 | 434 | 566 | 596 |
| WW02 | Technology Viability | - | 613 | 288 | 325 |
| WW03 | Technology Application | - | 182 | 67 | 114 |
| Total O | perating | 56,452 | 78,423 | 68,584 | 66,291 |
| BM01 VT12 | Biomass/Biofuels Energy Systems Batteries and Electric Drive Technology | 629 | - | 628 114 | 0 |
| Total Co | apital Equipment | 742 | - | 742 | 0 |
| LINE-ITE | M CONSTRUCTION | | | | |
| 39EB | Facilities and Infrastructure | 12,422 | - | 8,262 | 4,161 |
| Total Lir | ne-item Construction | 12,422 | - | 8,262 | 4,161 |
| TOTAL D | OOE PLANT | 12,422 | - | 8,262 | 4,161 |
| TOTAL A | ASSISTANT SECRETARY FOR ENERGY EFFICIENCY AND RENEWABLE ENERGY | 69,616 | 78,423 | 77,587 | 70,452 |
| Note: N | Minor variances may occur due to rounding. | | | | |





Table 2.4c

| | OFFICE OF ELECTRICITY DELIVERY AND ENERGY RELIABILITY | FY2013 Beginning Uncosted Obligations | FY2013 Funds | FY2013 Costs | FY2013 Ending Uncosted Obligations |
|---------|-------------------------------------------------------|---------------------------------------|-----------------|-----------------|---------------------------------------------|
| OPERA: | TING | | | | |
| TD50 | Research and Development | 2,785 | - | 1,258 | 1,527 |
| TD54 | Operations and Analysis | 1,803 | - | 1,433 | 370 |
| TE11 | Clean Energy Transmission & Reliability | 3,238 | 4,824 | 2,681 | 5,381 |
| TE12 | Smart Grid Research and Development | 927 | 1,100 | 701 | 1,326 |
| TF00 | Permitting, Siting and Analysis | 2,840 | 2,561 | 1,405 | 3,995 |
| Total O | perating | 11,593 | 8,485 | 7,479 | 12,599 |
| TOTAL (| OFFICE OF ELECTRICITY DELIVERY AND ENERGY RELIABILITY | 11,593 | 8,485 | 7,479 | 12,599 |
| Note: | Minor variances may occur due to rounding. | | | | |
| | ASSISTANT SECRETARY FOR FOSSIL ENERGY | FY2013 Beginning Uncosted Obligations | FY2013 Funds | FY2013 Costs | FY2013 Ending Uncosted Obligations |
| OPERA: | TING | | | | |
| AA15 | Advanced Research | 712 | (0) | 691 | 21 |
| AA20 | Central Systems | 192 | (0) | 123 | 69 |
| AA25 | Fuel Cells | 0 | (0) | (3) | 3 |
| AA30 | Sequestration | 5,048 | - | 3,371 | 1,677 |
| AA60 | Advanced Energy Systems | 300 | - | 300 | 0 |
| AA65 | Carbon Capture | 819 | 160 | 600 | 379 |
| AA70 | Carbon Storage | 3,731 | 2,283 | 2,046 | 3,969 |
| AA90 | Cross Cutting Research | 2,535 | 2,563 | 1,955 | 3,142 |
| AB05 | Natural Gas Technologies | 404 | 210 | 404 | 209 |
| AC10 | Oil Technology | 340 | (0) | 185 | 155 |
| AD20 | Contractual Services And Supplies | 6 | - | 4 | 3 |
| AE10 | Advanced Metallurgical Processes | 0 | (0) | - | - |
| AY05 | Clean Coal Power Initiative | 338 | - | 65 | 273 |
| BD00 | Unconventional Fossil Energy Technologies | 93 | - | - | 93 |
| CE03 | Center for Zero Emissions Technology - Montana State | 88 | - | 76 | 12 |
| CE47 | Innovations for Low-Cost Gasification Systems | 5 | - | - | 5 |
| CE54 | Design and Test of an Advanced SOFC Generator in PA | 6 | - | - | 6 |
| Total O | perating | 14,618 | 5,215 | 9,817 | 10,016 |
| TOTAL | ASSISTANT SECRETARY FOR FOSSIL ENERGY | 14,618 | 5,215 | 9,817 | 10,016 |
| Note: | Minor variances may occur due to rounding. | | | | |
| | LOAN PROGRAMS OFFICE | FY2013 Beginning Uncosted Obligations | FY2013 Funds | FY2013 Costs | FY2013 Ending Uncosted Obligations |
| OPERA | TING | | | | |
| LG20 | Loan Guarantee Program Contract Support | - | 15 | 15 | 0 |
| Total O | perating | - | 15 | 15 | 0 |
| TOTAL I | OAN PROGRAMS OFFICE | - | 15 | 15 | 0 |
| Note: | Minor variances may occur due to rounding. | | | | |

Table 2.4d

| | ASSISTANT SECRETARY FOR ENVIRONMENTAL MANAGEMENT | FY2013 Beginning Uncosted Obligations | FY2013 Funds | FY2013 Costs | FY2013 Ending Uncosted Obligations |
|--------------------------|------------------------------------------------------------------------------|---------------------------------------|-----------------|-----------------|---------------------------------------------|
| OPER/ | ATING | | | | , |
| EY40 | Defense Site Acceleration Completion - Technology Development and Deployment | 182 | 1,030 | 994 | 218 |
| EY80 | Defense Environmental Cleanup - Program Support | 0 | 115 | 47 | 68 |
| EZ50 | Non-Defense Environmental Cleanup - Small Sites | 597 | 19,378 | 1,098 | 18,878 |
| Total (| Operating | 780 | 20,523 | 2,138 | 19,164 |
| TOTAL | ASSISTANT SECRETARY FOR ENVIRONMENTAL MANAGEMENT | 780 | 20,523 | 2,138 | 19,164 |
| Note: | Minor variances may occur due to rounding. | | | | |
| | OFFICE OF HEALTH SAFETY AND SECURITY | FY2013 Beginning Uncosted Obligations | FY2013 Funds | FY2013 Costs | FY2013 Ending Uncosted Obligations |
| OPER/ | ATING | | | | |
| HQ10 | Employee Compensation | 28 | 34 | 40 | 22 |
| Total (| Operating | 28 | 34 | 40 | 22 |
| TOTAL | OFFICE OF HEALTH SAFETY AND SECURITY | 28 | 34 | 40 | 22 |
| | ASSISTANT SECRETARY FOR NUCLEAR ENERGY | FY2013 Beginning Uncosted Obligations | FY2013 Funds | FY2013 Costs | FY2013 Ending Uncosted Obligations |
| OPER/ | ATING | | | | |
| AF58 | Fuel Cycle Research and Development (FCR&D) | 483 | 2,930 | 2,885 | 528 |
| DF01 | First Repository | 30 | - | 12 | 18 |
| NT01 | Crosscutting Technology Development | 111 | - | 96 | 15 |
| RC04 | Advanced Reactor Concepts (ARC) | 79 | - | 79 | 0 |
| Total (| Operating | 703 | 2,930 | 3,072 | 561 |
| TOTAL | ASSISTANT SECRETARY FOR NUCLEAR ENERGY | 703 | 2,930 | 3,072 | 561 |
| | | | | | |
| Note: | Minor variances may occur due to rounding. | | | | |
| Note: | Minor variances may occur due to rounding. OFFICE OF LEGACY MANAGEMENT | FY2013 Beginning Uncosted Obligations | FY2013 Funds | FY2013 Costs | FY2013 Ending Uncosted Obligations |
| Note: | OFFICE OF LEGACY MANAGEMENT | Beginning Uncosted | | | Ending Uncosted |
| | OFFICE OF LEGACY MANAGEMENT | Beginning Uncosted | | | Ending Uncosted Obligations |
| OPERA LM01 Total (| OFFICE OF LEGACY MANAGEMENT | Beginning Uncosted | Funds | | Ending Uncosted |





Table 2.4e

| | OFFICE OF ENERGY AND THREAT | FY2013 Beginning Uncosted Obligations | FY2013 Funds | FY2013 Costs | FY2013 Ending Uncosted Obligations | |
|---------|----------------------------------------------------------|------------------------------------------|-----------------|-----------------|---------------------------------------------|--|
| OPERA | TING | | | | | |
| GD40 | Program Direction | 80 | 138 | 164 | 54 | |
| Total C | perating | 80 | 138 | 164 | 54 | |
| TOTAL | TOTAL OFFICE OF ENERGY AND THREAT 80 138 164 | | | | | |
| Note: | Minor variances may occur due to rounding. | | | | | |
| , | ASSISTANT SECRETARY FOR POLICY AND INTERNATIONAL AFFAIRS | FY2013 Beginning Uncosted Obligations | FY2013 Funds | FY2013 Costs | FY2013 Ending Uncosted Obligations | |
| OPERA | TING | | | | | |
| PE04 | Office Of Environmental Analysis | 5 | - | - | 5 | |
| PE06 | Climate Change Technology Program | 106 | 200 | 76 | 230 | |
| WA22 | Office of International Affairs - Program Direction | 7 | - | - | 7 | |
| Total C | perating | 118 | 200 | 76 | 242 | |
| TOTAL | ASSISTANT SECRETARY FOR POLICY AND INTERNATIONAL AFFAIRS | 118 | 200 | 76 | 242 | |
| Note: | Minor variances may occur due to rounding. | | | | | |
| | OFFICE OF MANAGEMENT | FY2013 Beginning Uncosted Obligations | FY2013 Funds | FY2013 Costs | FY2013 Ending Uncosted Obligations | |
| OPERA | TING | ' | | | | |
| MA10 | Other Related Expenses - Contractual Services | 1 | - | - | 1 | |
| Total C | perating | 1 | - | - | 1 | |
| TOTAL | OFFICE OF MANAGEMENT | 1 | - | - | 1 | |
| Note: | Minor variances may occur due to rounding. | · | | | | |
| | ADVANCED RESEARCH PROJECTS AGENCY - ENERGY | FY2013 Beginning Uncosted Obligations | FY2013 Funds | FY2013 Costs | FY2013 Ending Uncosted Obligations | |
| OPERA | TING | | | | | |
| CJ01 | ARPA-E Projects | 3,792 | 4,131 | 3,651 | 4,272 | |
| Total C | Departing 2 | 3,792 | 4,131 | 3,651 | 4,272 | |
| | ADVANCED RESEARCH PROJECTS AGENCY - ENERGY | 3,792 | 4,131 | 3,651 | 4,272 | |
| | Minor variances may occur due to rounding. | | | | | |

Table 2.5

FY2013 Funding and Costs by Other Direct Operating Source (\$K)

| Funding Source | FY2013 Beginning Uncosted Obligations | FY2013 Funds | FY2013 Costs | FY2013 Ending Uncosted Obligations |
|---------------------------------------------------------------------|---------------------------------------|-----------------|-----------------|---------------------------------------------|
| REIMBURSABLE WORK FOR OTHER - AGENCIES | | | | |
| Work for Other - Federal Agencies | | | | |
| Department of Agriculture | 0 | (0) | 0 | - |
| Department of Defense | 7,490 | 16,262 | 11,943 | 12,048 |
| Department of Homeland Security - Borders and Transportation | 904 | 901 | 1,274 | 520 |
| Department of Homeland Security - Domestic Nuclear Detection Office | 230 | - | 227 | 3 |
| Department of Homeland Security - Science and Technology | 1,401 | 3,682 | 3,603 | 1,480 |
| Department of Housing And Urban Development | 179 | 194 | 163 | 215 |
| Department of State - Other | 1 | (2) | (1) | - |
| Department of The Interior | 658 | 540 | 397 | 812 |
| Environmental Protection Agency | 1,043 | 1,087 | 1,594 | 581 |
| National Aeronautics And Space Administration | 3,627 | 4,494 | 5,047 | 3,222 |
| National Institutes of Health (a) | 31,868 | 30,508 | 33,069 | 29,435 |
| National Science Foundation (a) | 576 | 436 | 602 | 428 |
| Nuclear Regulatory Commission | 515 | 661 | 607 | 564 |
| Other Federal Agencies | 3,166 | 3,711 | 3,834 | 3,152 |
| Other Federal Agencies - Defense-Related Activities | 175 | 18 | 101 | 96 |
| Other Federal Agencies - Energy-Related Activities | 102 | 174 | 81 | 198 |
| Total Work for Other - Federal Agencies | 51,937 | 62,667 | 62,538 | 52,754 |
| Work for Non-Federal Agencies | | | | |
| Foreign Governments | 329 | 510 | 439 | 359 |
| Domestic and Foreign Industry | 7,353 | 14,662 | 14,653 | 7,753 |
| State and Local Governments & NPO's | 9,419 | 29,544 | 28,209 | 10,821 |
| Universities and Institutes | 3,272 | 11,022 | 11,644 | 2,633 |
| Cost of Work for Other Program (WN) (b) | 5,634 | 2,000 | 1,166 | 6,472 |
| Total Work for Non-Federal Agencies | 26,008 | 57,737 | 56,111 | 28,038 |

Note: Minor variances may occur due to rounding.

⁽a) FY2013 ARRA National Institutes of Health (NIH) and National Science Foundation (NSF) awards were obligated to LBNL by DOE as work for a Non-Federal entity to accommodate OMB apportionment requirements for ARRA. For reporting consistency with prior and future years, all NIH and NSF funding and cost data is reflected under the Work for Other Federal Agencies category.

⁽b) Includes funding for Non-Federal Sponsors who are precluded by law from paying an advance under the WN02 program.





Table 2.5

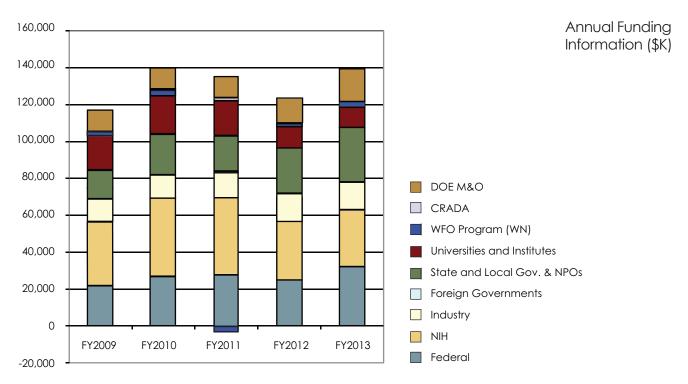
FY2013 Funding and Costs by Other Direct Operating Source (\$K) Continued

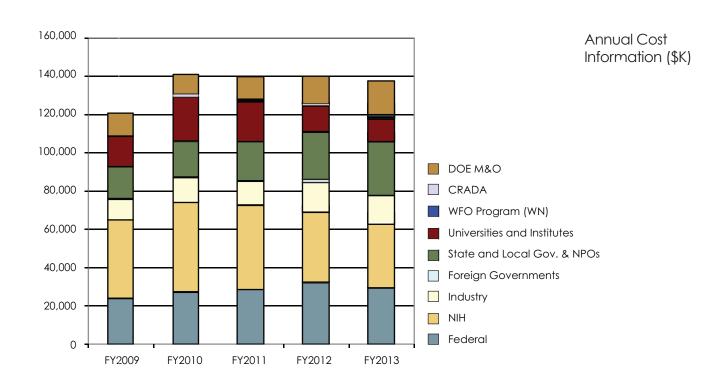
| Funding Source | FY2013 Beginning Uncosted Obligations | FY2013 Funds | FY2013 Costs | FY2013 Ending Uncosted Obligations |
|-------------------------------------------------------|---------------------------------------|-----------------|-----------------|---------------------------------------------|
| Cooperative Research and Development Agreements | | | | |
| CRADA - Other | 515 | 1,188 | 1,200 | 553 |
| CRADA - Small Business | - | 4 | 4 | - |
| Total Cooperative Research and Development Agreements | 515 | 1,192 | 1,204 | 553 |
| | | | | |
| TOTAL REIMBURSABLE WORK FOR OTHER | 78,459 | 121,595 | 119,854 | 81,345 |
| Work for Other DOE Integrated Contractors | | | | |
| Work Performed for Other DOE Locations (c) | - | 17,537 | 17,537 | - |
| Total Work for Other DOE Integrated Contractors | - | 17,537 | 17,537 | - |
| | | | | |
| TOTAL OTHER DIRECT OPERATING (d) (e) | 78,459 | 139,132 | 137,391 | 81,345 |

- (c) Total funding for Work for Other Integrated Contractors is assumed to be equal to cost incurred.
- (d) The sum of FY2013 Beginning Uncosted Obligations, FY2013 Funds, minus, FY2013 Costs does not equal FY2013 Ending Uncosted Obligations due to various adjustments not reflected in the FY2013 Costs column. Examples of these adjustments include bridge funding, suspense items, and DOE's Federal Administrative Charge. The total of these adjustments for FY2013 is (\$-1,145K).
- (e) Includes FY2013 Beginning Uncosted Obligations, FY2013 Funds and FY2013 Costs for American Recovery and Reinvestment Act (ARRA), (\$626K, \$2,670K, \$3,154K). See Table 3.4 for details by sponsor.

Figure 2.1







3. AMERICAN RECOVERY & REINVESTMENT ACT OF 2009 (ARRA)





Table 3.1

LBNL ARRA Funding Trends (BA) by Funding Source (\$K)

| LBNL Fund Trends (BA) by funding source (\$K) | FY2009 | FY2010 | FY2011 | FY2012 | FY2013 |
|----------------------------------------------------------------------------------------------------------|----------|--------|---------|----------|--------|
| DOE OPERATING | | | | | |
| Advanced Research Projects Agency - Energy | 28 | 5,297 | - | - | - |
| Assistant Secretary for Energy Efficiency and Renewable Energy | 3,664 | 37,206 | 2,289 | (0) | (2) |
| Assistant Secretary for Fossil Energy | - | 4,950 | - | - | - |
| Office of Electricity Delivery and Energy Reliability | - | 2,795 | - | - | - |
| Office of Science | 78,742 | 17,717 | 4,948 | 13,074 | (5) |
| Total Operating | 82,434 | 67,965 | 7,237 | 13,074 | (7) |
| OTHER DIRECT OPERATING | <u> </u> | | | | |
| Work for Other Federal Agencies | 1,767 | 5,453 | 6,182 | 1,621 | (12) |
| Work for Non-Federal Sponsors (a) | 25 | 1,930 | 3,504 | 1,116 | 1,154 |
| Work for Other DOE Integrated Contractors (b) (c) | - | 1,098 | 1,924 | 2,198 | 1,529 |
| Total Other Direct Operating | 1,792 | 8,481 | 11,610 | 4,935 | 2,670 |
| | | | | | |
| TOTAL OPERATING | 84,226 | 76,446 | 18,847 | 18,009 | 2,315 |
| Basic Equipment/Major Items of Equipment Assistant Secretary for Energy Efficiency and Renewable Energy | - | 4,700 | - | - | - |
| | | 4 700 | | | |
| Office of Science (a) | 75,950 | (492) | (4,949) | (13,074) | (1) |
| Total DOE Capital Equipment | 75,950 | 4,209 | (4,949) | (13,074) | (1) |
| General Plant Projects | | | | | |
| Office of Science | 16.300 | _ | | _ | |
| Accelerator Improvement Projects | 10,000 | | | | |
| Office of Science | 7,680 | - | | - | |
| Line-Item Construction | | | | | |
| Assistant Secretary for Energy Efficiency and Renewable Energy | _ | 15,700 | _ | - | _ |
| Office of Science | 29,546 | - | _ | (0) | (0) |
| Total DOE Plant | 53,526 | 15,700 | - | (0) | (0) |
| TOTAL DOE PLANT AND CAPITAL EQUIPMENT | 129,476 | 19,909 | (4,949) | (13,074) | (1) |
| TOTAL LABORATORY | 010.700 | 0/ 25/ | 12.000 | 4 005 | 0.440 |
| TOTAL LABORATORY | 213,702 | 96,354 | 13,898 | 4,935 | 2,662 |

- (a) Total Funding for FY2010 Work for Non-Federal Sponsors as reported in the FY2010 Annual Report is different than stated herein. Difference is a result of a Work for Other DOE Integrated Contractors award changing status from Non ARRA to ARRA. The impact to Funding for FY2010 is \$33.3K. As a result of this change, FY2010 Report ARRA Funding Work for Non-Federal Sponsors is restated as \$1,930.
- (b) Total funding for Work for Other Integrated Contractors is assumed to be equal to cost incurred.
- (c) Total Funding for FY2010 for Work for Other DOE Integrated Contractors as reported in the FY2010 Annual Report is different than stated herein. Difference is a result of a Work for Other DOE Integrated Contractors award changing status from Non ARRA to ARRA. The impact to Funding for FY2010 is \$221.9K. As a result of this change, FY2010 Report ARRA Funding Work for Other DOE Integrated Contracts is restated as \$1,098.

Table 3.2

LBNL ARRA Cost Trends by Funding Source (\$K)

| LBNL Spending Trends by Funding Source (\$K) | FY2009 | FY2010 | FY2011 | FY2012 | FY2013 |
|----------------------------------------------------------------|--------------|---------|---------|--------|--------|
| OPERATING | | ' | | ' | |
| Advanced Research Projects Agency - Energy | 13 | 30 | 1,966 | 1,956 | 1,179 |
| Assistant Secretary for Energy Efficiency and Renewable Energy | 68 | 11,652 | 11,853 | 8,109 | 4,001 |
| Assistant Secretary for Fossil Energy | - | 208 | 1,314 | 2,345 | 927 |
| Office of Electricity Delivery and Energy Reliability | - | 450 | 589 | 327 | 525 |
| Office of Science | 4,368 | 30,689 | 36,484 | 28,101 | 12,268 |
| Total Operating | 4,449 | 43,029 | 52,206 | 40,838 | 18,902 |
| OTHER DIRECT OPERATING | | | | | |
| Work for Other Federal Agencies | 40 | 6,015 | 7,181 | 1,701 | 13 |
| Work for Non-Federal Sponsors | 40 | 1,195 | 2,927 | 1,701 | 1,613 |
| Work for Other DOE Integrated Contractors (a) | _ | 1,098 | 1,924 | 2,198 | 1,519 |
| Total Other Direct Operating | 40 | 8,308 | 12,032 | 5,803 | 3,154 |
| Total Office Direct Operating | 40 | 0,000 | 12,002 | 3,000 | 0,134 |
| TOTAL OPERATING | 4,489 | 51,336 | 64,238 | 46,642 | 22,056 |
| | | | | | |
| DOE PLANT AND CAPITAL EQUIPMENT | | | | | |
| Basic Equipment/Major Items of Equipment | | | | | |
| Assistant Secretary for Energy Efficiency and Renewable Energy | - | - | 3,195 | 876 | 628 |
| Office of Science | 560 | 27,277 | 19,781 | 9,339 | 476 |
| Total Capital Equipment | 560 | 27,277 | 22,977 | 10,215 | 1,104 |
| General Plant Projects | . | | | | |
| Office of Science | 1,684 | 11,577 | 357 | 2,141 | 541 |
| Accelerator Improvement Projects | , | , | | , | |
| Office of Science | 119 | 945 | 1,837 | 2,212 | 2,567 |
| Line-Item Construction | | | | | |
| Assistant Secretary for Energy Efficiency and Renewable Energy | _ | 91 | 1,151 | 2,036 | 8,262 |
| Office of Science | 4,119 | 13,311 | 10,685 | 1,431 | - |
| Total DOE Plant | 5,922 | 25,924 | 14,029 | 7,820 | 11,370 |
| TOTAL DOE PLANT AND CAPITAL EQUIPMENT | 6,482 | 53,201 | 37,006 | 18,035 | 12,474 |
| 1977 E 202 I EATH AND OAI HAE EQUI MENT | 0,702 | 00,201 | 07,000 | 13,003 | 14,777 |
| TOTAL LABORATORY | 10,971 | 104,537 | 101,244 | 64,677 | 34,530 |

Note: Minor variances may occur due to rounding.

⁽a) Total Costs for FY2010 for Work for Other DOE Integrated Contractors as reported in the FY2010 Annual Report is different as stated herein. Difference is a result of a Work for Other DOE Integrated Contractors award changing status from Non ARRA to ARRA. The impact to Costs for FY2010 is \$221.9K. As a result of this change FY2010 Report is restated as Funding \$1,098.





Figure 3.1

Where Did Your ARRA Program Dollars Go in FY2013?

| Expenses | DOE Operating Costs | DOE Integrated Contractors Costs | Construction and Equipment | WFO Non-DOE |
|--------------------------------|---------------------|-------------------------------------|-------------------------------|-------------|
| DIRECT | | | , | |
| Direct Labor | | | | |
| UC Labor (a) | \$0.24 | \$0.27 | \$0.12 | \$0.50 |
| Contract Labor | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Organization/ALD Burden (b) | \$0.04 | \$0.05 | \$0.02 | \$0.09 |
| Subtotal Direct Labor | \$0.28 | \$0.32 | \$0.14 | \$0.58 |
| Other Direct | ` | | · · | |
| Services | \$0.36 | \$0.46 | \$0.64 | \$0.04 |
| Materials | \$0.17 | \$0.00 | \$0.16 | \$0.01 |
| Utilities | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Other Expenses (c) (e) | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Recharges (b) (d) (e) | \$0.01 | \$0.02 | \$0.01 | \$0.03 |
| Travel | \$0.01 | \$0.01 | \$0.00 | \$0.02 |
| Subtotal Other Direct | \$0.55 | \$0.49 | \$0.80 | \$0.10 |
| Total Direct | \$0.83 | \$0.81 | \$0.94 | \$0.68 |
| INDIRECT | | | | |
| Procurement | \$0.02 | \$0.02 | \$0.02 | \$0.00 |
| Travel | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| G&A (Other Inst.) | \$0.16 | \$0.18 | \$0.04 | \$0.31 |
| Total Indirect | \$0.17 | \$0.19 | \$0.06 | \$0.32 |
| TOTAL EXPENSES | \$1.00 | \$1.00 | \$1.00 | \$1.00 |

- (a) UC Labor includes salary and benefits for Scientists/Engineers, Admin., Students/GSRA's and Campus Labor.
- (b) Distributed activities used by direct funded programs. ALD Burden implemented at beginning of FY2013.
- (c) Includes misc. expenses (stipends, sales tax, freight, etc.).
- (d) Includes recharges credited back to direct operating accounts such as ALS and ESnet.
- (e) Safeguards and Securities costs moved from Other Expenses to Recharges for FY2013 report.

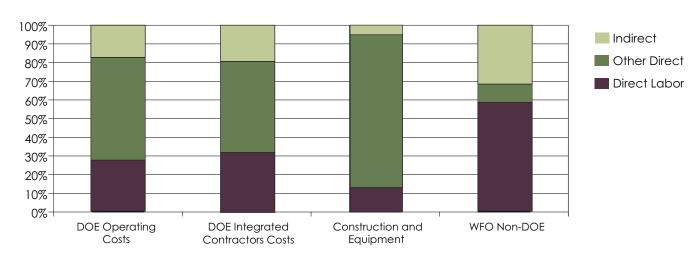


Table 3.3

FY2013 ARRA Funding and Costs by DOE Programs (\$K)

| | Office of Science ARRA | FY2013 Beginning Uncosted Obligations | FY2013 Funds | FY2013 Costs | FY2013 Ending Uncosted Obligations |
|-----------|-------------------------------------------------------------|---------------------------------------|-----------------|-----------------|---------------------------------------------|
| OPERAT | TING: | | | | |
| KA14 | Theoretical Physics | 1,426 | - | 588 | 838 |
| KA15 | Advanced Technology R&D | 249 | (0) | 244 | 5 |
| KB03 | Nuclear Theory | 1,494 | - | 748 | 746 |
| KB04 | Low Energy Physics | 274 | - | 274 | 0 |
| KC02 | Materials Sciences and Engineering | 1,384 | - | 492 | 892 |
| KG06 | Excess Facilities Disposition | 0 | (0) | - | - |
| KJ04 | Mathematical, Computational, and Computer Sciences Research | 1,922 | - | 1,840 | 82 |
| KJ05 | High Performance Computing and Network Facilities | 8,089 | (5) | 8,082 | 2 |
| Total O | perating | 14,839 | (5) | 12,268 | 2,566 |
| CAPITA | L EQUIPMENT: | | | | |
| AT50 | Fusion Energy Sciences - Science | 1 | (1) | - | - |
| KA15 | Advanced Technology R&D | 439 | (0) | 438 | 1 |
| KC02 | Materials Sciences and Engineering | 39 | - | 38 | 1 |
| Total Co | apital Equipment | 478 | (1) | 476 | 1 |
| GENERA | AL PLANT PROJECTS: | | | | , |
| KG09 | General Plant Projects | 541 | - | 541 | 0 |
| Total G | eneral Plant Projects | 541 | - | 541 | 0 |
| ACCEL | ERATOR IMPROVEMENT PROJECTS: | | | | , |
| KB04 | Low Energy Physics | 0 | - | - | 0 |
| KC02 | Materials Sciences and Engineering | 2,567 | - | 2,567 | 0 |
| Total A | ccelerator Improvement Projects | 2,567 | - | 2,567 | 0 |
| LINE ITE | M CONSTRUCTION: | | | | |
| 39KG | Science Laboratories Infrastructure | 0 | (0) | - | - |
| Total Lir | ne Item Construction | 0 | (0) | - | - |
| | | | | | |
| TOTAL C | OFFICE OF SCIENCE ARRA | 18,425 | (6) | 15,853 | 2,567 |





Table 3.3

FY2013 ARRA Funding and Costs by DOE Programs (\$K) Continued

| As | ssistant Secretary for Energy Efficiency and Renewable Energy ARRA | FY2013 Beginning Uncosted Obligations | FY2013 Funds | FY2013 Costs | FY2013 Ending Uncosted Obligations |
|----------|--------------------------------------------------------------------|------------------------------------------------|-----------------|-----------------|---------------------------------------------|
| OPERA | TING: | | | | |
| BM01 | Biomass/Biofuels Energy Systems | 2,598 | - | 765 | 1,833 |
| BR01 | EE Departmental Admin, Recovery Act | 2,146 | - | 537 | 1,608 |
| BTO1 | Residential Buildings | 2 | (2) | (0) | 0 |
| BT02 | Commercial Buildings Integration | 3,482 | - | 970 | 2,512 |
| EB36 | Facilities and Infrastructure | 5 | - | - | 5 |
| EB40 | Geothermal | 228 | - | 227 | 1 |
| EB51 | Energy Efficiency and Renewable Energy Program Direction | 2,516 | - | 1,001 | 1,515 |
| WI07 | Weatherization Assistance Program | 502 | - | 502 | 0 |
| Total O | perating | 11,478 | (2) | 4,001 | 7,474 |
| CAPITA | AL EQUIPMENT: | | | | |
| BM01 | Biomass/Biofuels Energy Systems | 629 | - | 628 | 0 |
| Total C | apital Equipment | 629 | - | 628 | 0 |
| LINE ITE | EM CONSTRUCTION: | | | | |
| 39EB | Facilities and Infrastructure | 12,422 | - | 8,262 | 4,161 |
| Total Li | ne Item Construction | 12,422 | - | 8,262 | 4,161 |
| | | | | | |
| TOTAL | ASSISTANT SECRETARY FOR ENERGY EFFICIENCY AND RENEWABLE ENERGY | 24,529 | (2) | 12,891 | 11,636 |
| | | | | | |
| | Assistant Secretary for Fossil Energy ARRA | FY2013 Beginning Uncosted Obligations | FY2013 Funds | FY2013 Costs | FY2013 Ending Uncosted Obligations |
| OPERA | TING: | | | | |
| AA30 | Sequestration | 1,083 | - | 927 | 156 |
| Total O | perating | 1,083 | - | 927 | 156 |
| | | | | | |
| TOTAL | ASSISTANT SECRETARY FOR FOSSIL ENERGY | 1,083 | - | 927 | 156 |

Table 3.3

| | Office of Electricity Delivery and Energy Reliability ARRA | FY2013 Beginning Uncosted Obligations | FY2013 Funds | FY2013 Costs | FY2013 Ending Uncosted Obligations |
|----------|--------------------------------------------------------------------------------------------------------|---------------------------------------|-----------------|-----------------|---------------------------------------------|
| OPERATI | NG: | | | | |
| TD50 | Research and Development | 1,429 | - | 525 | 904 |
| Total Op | perating | 1,429 | - | 525 | 904 |
| | | | | | , |
| TOTAL O | FFICE OF ELECTRICITY DELIVERY AND ENERGY RELIABILITY | 1,429 | - | 525 | 904 |
| | | | | | |
| | Advanced Research Projects Agency - Energy | FY2013 Beginning Uncosted Obligations | FY2013 Funds | FY2013 Costs | FY2013 Ending Uncosted Obligations |
| OPERATI | NG: | | | | |
| CJ01 | ARPA-E Projects | 1,359 | - | 1,179 | 180 |
| Total Op | perating | 1,359 | - | 1,179 | 180 |
| | | | | | |
| TOTAL A | DVANCED RESEARCH PROJECTS AGENCY - ENERGY (a) | 1,359 | - | 1,179 | 180 |
| | anced Research Projects Agency - Energy was previously reported un ects) in FY2009, FY2010, FY2011. | der Office of the | Chief Find | ancial Offic | cer (ARPA-E |
| | Total ARRA Funding and Costs by DOE Programs | FY2013 Beginning Uncosted Obligations | FY2013 Funds | FY2013 Costs | FY2013 Ending Uncosted Obligations |
| TOTAL O | PERATING | 30,188 | (7) | 18,902 | 11,280 |
| TOTAL EC | QUIPMENT | 1,107 | (1) | 1,104 | 2 |
| TOTAL G | ENERAL PLANT PROJECTS | 541 | - | 541 | 0 |
| TOTAL A | CCELERATOR IMPROVEMENT PROJECTS | 2,567 | - | 2,567 | 0 |
| TOTAL LI | NE ITEM CONSTRUCTION | 12,422 | (0) | 8,262 | 4,161 |
| | | 1 | 1 | | 1 |
| | | | | | |





Table 3.4

FY2013 ARRA Funding and Costs by Other Direct Operating Source (\$K)

| Funding Source | FY2013 Beginning Uncosted Obligations | FY2013 Funds | FY2013 Costs | FY2013 Ending Uncosted Obligations |
|-------------------------------------------------|---------------------------------------|-----------------|-----------------|---------------------------------------------|
| REIMBURSABLE WORK FOR OTHER AGENCIES | | | | |
| Work for Other - Federal Agencies | | | | |
| Department of Defense | 0 | (0) | - | - |
| National Institutes of Health (a) | 3 | (8) | - | - |
| Other Energy Related Activities | 77 | (4) | 13 | 60 |
| Total Work for Other - Federal Agencies | 80 | (12) | 13 | 60 |
| Work for Other - Non-Federal Agencies | | | | |
| Industry | 246 | 632 | 815 | 67 |
| Universities and Institutes | 131 | 173 | 291 | 20 |
| Cost of Work for Others Program (WN) (b) | 169 | 348 | 506 | 11 |
| Total Work for Non-Federal Agencies | 546 | 1,154 | 1,613 | 98 |
| TOTAL REIMBURSABLE WORK FOR OTHER | 626 | 1,141 | 1,626 | 158 |
| Work for Other DOE Integrated Contractors | | | | |
| Work Performed for Other DOE Locations (c) | - | 1,529 | 1,529 | - |
| Total Work for Other DOE Integrated Contractors | - | 1,529 | 1,529 | - |
| TOTAL OTHER DIRECT OPERATING (d) | 626 | 2,670 | 3,154 | 158 |

⁽a) FY2013 ARRA National Institutes of Health (NIH) awards were obligated to LBNL by DOE as work for a Non-Federal entity to accommodate OMB apportionment requirements for ARRA. For reporting consistency with prior and future yeras, all NIH funding and cost data is reflected under the Work for Other Federal Agencies category.

⁽b) Includes funding for Non-Federal Sponsors who are precluded by law from paying an advance under the WN02 program.

⁽c) Total funding for Work for Other Integrated Contractors is assumed to be equal to cost incurred.

⁽d) The sum of FY2013 Beginning Uncosted Obligations, FY2013 Funds, minus, FY2013 Costs does not equal FY2013 Ending Uncosted Obligations due to various adjustments not reflected in the FY2013 Costs column. Examples of these adjustments include bridge funding, suspense items, and DOE's Federal Administrative Charge. The total of these adjustments for FY2013 is \$16K.

Table 3.5

ARRA Cost Trends by Expense Category, FY2009-FY2013 (\$M and % of Total)

| F | FY | 2009 | FY2 | 2010 | FY : | 2011 | FY : | 2012 | FY | 2013 |
|-----------------------------|------|--------|-------|--------|-------|--------|------|--------|------|--------|
| Expenses | \$M | % | \$M | % | \$M | % | \$M | % | \$M | % |
| DIRECT | | | | | | | | | | |
| DIRECT LABOR | | | | | | | | | | |
| UC Labor (a) | 0.6 | 5.9% | 11.0 | 10.5% | 18.0 | 17.8% | 12.9 | 19.9% | 7.2 | 20.8% |
| Contract Labor | 0.0 | 0.0% | 0.1 | 0.1% | 0.0 | 0.0% | 0.1 | 0.1% | 0.1 | 0.1% |
| Organization/ALD Burden (b) | 0.1 | 1.0% | 1.9 | 1.8% | 3.0 | 2.9% | 2.2 | 3.3% | 1.2 | 3.4% |
| Subtotal Direct Labor | 0.8 | 6.9% | 13.0 | 12.4% | 21.0 | 20.7% | 15.1 | 23.3% | 8.4 | 24.4% |
| OTHER DIRECT | • | | | | | | | | | |
| Services | 8.0 | 73.1% | 48.8 | 46.7% | 47.5 | 46.9% | 22.5 | 34.8% | 15.6 | 45.0% |
| Materials | 1.6 | 14.6% | 33.4 | 31.9% | 18.5 | 18.3% | 16.9 | 26.1% | 5.1 | 14.8% |
| Utilities | 0.0 | 0.0% | 0.0 | 0.0% | 0.0 | 0.0% | 0.0 | 0.0% | 0.0 | 0.0% |
| Other Expenses (c) (e) | 0.0 | 0.0% | 0.2 | 0.2% | 0.2 | 0.2% | 0.2 | 0.3% | 0.0 | 0.1% |
| Recharges (b) (d) (e) | 0.0 | 0.2% | 0.4 | 0.4% | 1.0 | 1.0% | 0.8 | 1.2% | 0.4 | 1.3% |
| Travel | 0.0 | 0.2% | 0.2 | 0.2% | 0.6 | 0.6% | 0.4 | 0.7% | 0.2 | 0.6% |
| Subtotal Other Direct | 9.7 | 88.1% | 83.0 | 79.4% | 67.8 | 67.0% | 40.8 | 63.1% | 21.3 | 61.7% |
| Total Direct | 10.4 | 95.0% | 96.0 | 91.8% | 88.8 | 87.7% | 55.9 | 86.5% | 29.7 | 86.1% |
| INDIRECT | | | | | | | | | | |
| Procurement | 0.1 | 1.3% | 1.5 | 1.4% | 1.5 | 1.5% | 1.1 | 1.6% | 0.6 | 1.7% |
| Travel | 0.0 | 0.0% | 0.0 | 0.0% | 0.1 | 0.1% | 0.1 | 0.1% | 0.0 | 0.1% |
| G&A (Other Inst.) | 0.4 | 3.6% | 7.0 | 6.7% | 10.9 | 10.7% | 7.6 | 11.8% | 4.2 | 12.1% |
| Total Indirect | 0.5 | 5.0% | 8.5 | 8.2% | 12.4 | 12.3% | 8.8 | 13.5% | 4.8 | 13.9% |
| | | | | | | | | | | |
| TOTAL EXPENSES (f) | 11.0 | 100.0% | 104.5 | 100.0% | 101.2 | 100.0% | 64.7 | 100.0% | 34.5 | 100.0% |

- (a) UC Labor includes salary and benefits for Scientists/Engineers, Admin., Students/GSRAs and Campus Labor.
- (b) Distributed activities used by direct funded programs. ALD Burden Implemented at beginning of FY2013.
- (c) Includes misc. expenses (stipends, sales tax, freight, etc.).
- (d) Includes recharges credited back to direct operating accounts such as ALS and ESnet.
- (e) Safeguards and Security funding moved from Environment/Health/Safety to Protective Services in FY2013.
- (f) Total Costs for FY2010 is different than in the FY2010 Annual Report based on a Work for Other DOE Integrated Contractors award changing status from Non-ARRA to ARRA. The impact to costs for FY2010 is a \$221.9K increase.





Table 3.6

ARRA Job Reporting

| DOF Direct ADDA Ductoral | Lif | Life-to-Date Jobs | | | |
|------------------------------------------------|---------|-------------------|---------|--|--|
| DOE Direct ARRA Project | Created | Retained | Total | | |
| Total DOE Direct ARRA Projects | 332.5 | 1,470.3 | 1,802.8 | | |
| Total Other Direct Operating ARRA Projects (a) | 89.7 | 33.7 | 123.3 | | |
| | | | | | |
| LBNL TOTAL | 422.2 | 1,503.9 | 1,926.1 | | |
| DOE Direct ARRA Project: | | | | | |
| ALS User Support Building | 5.2 | 106.0 | 111.3 | | |
| GPP, Upgrade Bldg 62 | 4.7 | 32.2 | 36.9 | | |
| GPP, Upgrade Bldg 66 | 2.6 | 19.5 | 22.1 | | |
| GPP, Air Handling Equipment | 0.9 | 11.2 | 12.1 | | |
| GPP, Upgrade Bldg 2 | 2.0 | 18.4 | 20.4 | | |
| GPP, Modernize Transformer | 4.5 | 8.6 | 13.1 | | |
| Bevatron Demolition | - | 22.7 | 22.7 | | |
| Seismic Phase 2, 09-SC-72 | 7.5 | 130.3 | 137.8 | | |
| Adv. Plasma Accel. Facility. (BELLA) | 25.3 | 34.5 | 59.8 | | |
| Nuclear Data Program Init. | - | 4.1 | 4.1 | | |
| Enh AIP Funding, Injector | 6.9 | 1.0 | 7.9 | | |
| Fed Lab Support for ARRA Trans | 1.1 | - | 1.1 | | |
| HEP-Adv Tech R&D Augmentation(Magnets) | 7.1 | 6.0 | 13.1 | | |
| Nanoscale Science Rsrch Centrs | 0.6 | 25.6 | 26.2 | | |
| Enh AIP Funding, RF Amplifier | 0.9 | - | 0.9 | | |
| Energy Frontier Research Cntrs | 0.2 | - | 0.2 | | |
| HEDLP NDCX-II | 23.4 | 33.7 | 57.1 | | |
| ALS Beamline Detectors | 5.6 | 1.1 | 6.7 | | |
| ALS Slice Beamline EPU | 6.3 | 1.8 | 8.0 | | |
| ALS Sextupoles Magnets | 16.3 | 2.3 | 18.6 | | |
| ALS High Field Vector Magnet | 3.1 | 5.8 | 8.9 | | |
| ARPA-E Early Harvest Solict. | 0.1 | - | 0.1 | | |
| Joint Genome Institute | - | 102.5 | 102.5 | | |
| Joint BioEnergy Institute | 0.0 | 39.8 | 39.8 | | |
| Advanced Networking Initiative | 19.5 | 547.3 | 566.8 | | |
| Comp. Partnerships (SciDAC-e) | 3.1 | 1.0 | 4.1 | | |

Table 3.6

ARRA Job Reporting Continued

| | | Life-to-Date Jobs | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-------------------|-------|--|
| Direct ARRA Project (Continued) | Created | Retained | Total | |
| Enhance FEMP Service Function | 4.5 | 1.3 | 5.7 | |
| LBNL Magellan Cloud Computing | 10.4 | 102.1 | 112.4 | |
| Climate 100 - ESG to 100 Gbps | 1.2 | - | 1.2 | |
| Petascale Initiative | 18.3 | - | 18.3 | |
| Enhanced Geothermal Systems (EGS) with C02 as Heat Transmission Fluid | 1.8 | 3.7 | 5.5 | |
| Coupled Thermal-Hydrological-Mechanical-Chemical Model and Experiments for Optimization of Enhanced Geothermal System Development and Production | 4.5 | 0.5 | 5.0 | |
| Fluid Imaging of Enhanced Geothermal Systems through Joint 3D Geophysical Inverse Modeling | 4.4 | 0.8 | 5.2 | |
| Integrated Approach to Use Natural Chemical and Isotopic Tracers to Estimate Fracture Spacing and Surface Area in EGS Systems | 6.2 | - | 6.2 | |
| National Accounts Acceleration in Support of Commercial Building Initiative | 10.2 | 6.4 | 16.6 | |
| Smart Grid Investment Grant Program | 2.4 | 2.7 | 5.1 | |
| Hospital Energy Benchmarking SysDev | 0.7 | 0.1 | 0.8 | |
| Incorporating EE into Commercial Mortgage Underwriting | 1.2 | 4.5 | 5.8 | |
| Northern California CO2 Reduction Project | 0.6 | - | 0.6 | |
| Builders Challenge and Existing Home Retrofits | 7.0 | 7.1 | 14.1 | |
| Advanced Biofuels PDU-Bioenergy Research Center Collaboration | 3.3 | 97.1 | 100.4 | |
| Deep Exploratory Test well for CO2 Sequestration purposes, Newark Basin- Southern New York and New Jersey | 2.1 | 0.7 | 2.7 | |
| Residential Home Retrofit Support & Research | 6.2 | - | 6.2 | |
| Home Retrofits Rating Support | 7.7 | 0.3 | 8.1 | |
| Residential Building Home Retrofit Analysis | 0.7 | 0.6 | 1.3 | |
| User Facility for Low Energy Integrated Buildings Systems Research (UTBF) | 8.1 | 52.7 | 60.7 | |
| High Energy Physics- Early Career Research Program | 8.1 | - | 8.1 | |
| Basic Energy Sciences- Early Career Research Program | 6.6 | - | 6.6 | |
| Nuclear Physics-Early Career Research Program | 8.1 | 0.5 | 8.6 | |
| NP-3D Gamma ray Imaging Technologies | 3.7 | - | 3.7 | |
| ASCR-Comp Partnerships- SciDAC-e-PERC-3-Enhancing Productivity of Materials Discovery computation for Solar fuels and Next Gen. Autotuning Large Computational codes. | 2.3 | 6.3 | 8.5 | |
| Visualization and Analytics Center for Enabling Technologies-VACET | 3.6 | - | 3.6 | |
| Applied Partial Differential Equations Center for Enabling Technologies(APDEC) | 3.1 | 1.9 | 5.0 | |
| Note: Minor variances may occur due to rounding. | | ' | | |





Table 3.6

ARRA Job Reporting Continued

| DOF Direct ADDA Brain of /Continued | Li | fe-to-Date Jo | bs |
|-------------------------------------------------------------------------------------------------------------|-------|---------------|---------|
| DOE Direct ARRA Project (Continued) | | Retained | Total |
| Towards Optimal Petascale Simulations-TOPS-SciDAC-e | 2.7 | - | 2.7 |
| EE Technical Assistance | 0.5 | - | 0.5 |
| Development of an Integrated Microbial-ElectroCatalytic (MEC) System for Liquid Biofuel Production from CO2 | 7.7 | 1.8 | 9.4 |
| High Throughput Discovery of Robust Metal Organic Frameworks for CO2 capture | 11.3 | 2.9 | 14.2 |
| ARRA Evaluation | 1.1 | 14.2 | 15.3 |
| LBNL ARRA Bridge - Evaluation Support | 0.2 | 5.3 | 5.5 |
| Industrial Carbon Capture & Storage: Joint Inversion of Monitoring Data for Early Leakage Detection | 9.3 | 1.4 | 10.7 |
| Carbon Capture Simulation initiative-Industrial Carbon Capture and Storage | 6.3 | - | 6.3 |
| Online Training tool-Weatherization Training and Technical Assistance | 5.4 | 0.3 | 5.7 |
| ARPA E- Hydrogen-Bromine Flow Batteries for Grid-Scale Energy Storage | 4.2 | - | 4.2 |
| Total DOE Direct ARRA Projects | 332.5 | 1,470.6 | 1,802.8 |

| | Lif | fe-to-Date Jo | bs |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------|------------------|------------|
| Other Direct Operating ARRA Project (a) | Jobs Created | Jobs Retained | Total Jobs |
| PHENIX FVTX Sensor Backplanes | 1.2 | - | 1.2 |
| PHENIX Station Disks | 0.0 | - | 0.0 |
| Evaluating Benefits of Advanced Metering Infrastructure, Smart Meters and Time-Varying Tariffs | 0.9 | - | 0.9 |
| Knowledgebase R&R Pilot Project | 1.8 | - | 1.8 |
| Knowledge Fusion and Data-Supported Deep Annotation for Reconstruction of Metabolism | - | 1.2 | 1.2 |
| Technical Support for the ARRA Technical Assistance Project (TAP) | 2.1 | - | 2.1 |
| Optics characterization for LCLS CXI and NIF SXI projects | 0.1 | - | 0.1 |
| Determining Technetium Speciation Using X-ray Absorption Fine Structure (XAFS) | 0.1 | - | 0.1 |
| Interregional Electricity Reliability Issue Assessment and Analysis | 0.8 | 1.6 | 2.4 |
| Area of Interest 2: New Technologies, Electricity Demand, and Utility Resource Plans | 4.0 | 1.1 | 5.1 |
| Technical Assistance to Electric Infrastructure Planners on Other Subjects | 0.7 | - | 0.7 |
| A Distributed Intelligence Automated Demand Response Building Management System | 1.1 | - | 1.1 |
| Note: Minor variances may occur due to rounding. (a) Other Direct Operating includes Work for Others, Federal Sponsors, Non-Federal Sponsors | i. | | |

Table 3.6

ARRA Job Reporting Continued

| Other Direct On custing ADDA Ducio of (a) (Combigues al) | Life-to-Date Jobs | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------|-------|--|
| Other Direct Operating ARRA Project (a) (Continued) | Created | Retained | Total | |
| Energy-Efficient and Comfortable Buildings through Multivariate Integrated Control (ECoMIC) | 1.8 | - | 1.8 | |
| Wireless Modular Dimming Lighting Control System | 0.7 | - | 0.7 | |
| Development of High Rate Sequential Coatings for Low Cost Electrochromic Glass | 1.2 | - | 1.2 | |
| ARRA Performance Tracking Metrics | 0.9 | - | 0.9 | |
| IWO - Battaglia | - | - | - | |
| Coatings for Superconducting Radio-Frequency (SRF) Cavities by HiPIMS Technology | - | - | - | |
| Automated Continuous Commissioning of Commercial Buildings | 1.4 | 0.2 | 1.6 | |
| Red Cell Band 4.1Developmental Changes in RNA Splicing | 2.6 | 2.0 | 4.6 | |
| Red Cell Band 4.1 - Developmental Changes in RNA Splicing | 3.3 | - | 3.3 | |
| Age of Onset and Huntingtons Disease | 2.6 | 0.3 | 3.0 | |
| Age of Onset and Huntingtons Disease | 3.3 | - | 3.3 | |
| In Vivo Analysis of a Noncoding Susceptibility Region for Coronary Artery Disease | 3.5 | - | 3.5 | |
| The Berkeley Cancer Genome Center | - | 0.8 | 0.8 | |
| Accelerating Cancer Research with Single Cell Arrays | 0.1 | 0.8 | 0.9 | |
| ARRA Development of the Cell Ontology in Support of the Gene Ontology | 2.1 | - | 2.1 | |
| Self-healing Composites via Novel Biomolecular Design and Processing | 2.4 | - | 2.4 | |
| MT Function and Dysfunction in Single Neurons in Vivo | 4.7 | 0.2 | 4.9 | |
| Comprehensive characterization of the Drosophila transcriptome | 0.5 | 2.3 | 2.8 | |
| Beamline Automation for Structure Determination | 0.8 | 0.7 | 1.5 | |
| Bay Area Breast Cancer and the Environment Research Center | 0.9 | - | 0.9 | |
| Mapping Anti-Cancer Drugs Using Advanced X-Ray Microanalysis | 0.2 | - | 0.2 | |
| ARRA Gene Ontology Consortium | 1.6 | - | 1.6 | |
| Genome-Wide Mapping of Chromosomal Proteins in Drosophilia | 0.1 | 4.8 | 4.8 | |
| Generation of an In vivo Human Genome Transcriptional Enhancer Dataset | 1.2 | - | 1.2 | |
| Matrix- Based Mineral (MBM) Enamel Biomimetics | 1.0 | - | 1.0 | |
| Integrated nanoparticle characterization and toxicity assessment | 0.1 | - | 0.1 | |
| Note: Minor variances may occur due to rounding. (a) Other Direct Operating includes Work for Others, Federal Sponsors, Non-Federal Sponsors | sors. | | | |





Table 3.6

ARRA Job Reporting Continued

| | Li | fe-to-Date Job | os |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|----------------|-------|
| Other Direct Operating ARRA Project (a) (Continued) | Created | Retained | Total |
| Integrated nanoparticle characterization and toxicity assessment | 0.1 | - | 0.1 |
| Biomimetic Actinide Decorporation: Characterization and Preclinical Development | 9.5 | 9.2 | 18.7 |
| Manipulating b1 integrin to enhance radiation therapy for breast cancer | 0.6 | 1.5 | 2.1 |
| Non-B DNA Structure with Chemical Carcinogens | 0.0 | 1.6 | 1.6 |
| STCI: Middleware for Monitoring and Troubleshooting of Large-Scale Applications on National Cyberinfrastructure | 3.7 | - | 3.7 |
| PHENIX: new methods for automation in macromolecular crystallography | 0.3 | 2.0 | 2.2 |
| Mismatch Repair and DNA Expansion | 0.8 | - | 0.8 |
| Materials for Green Engineering of Urban Areas | 0.0 | - | 0.0 |
| Production of Advanced Coatings for Solar Cells | 0.1 | - | 0.1 |
| Multidimensional Electrofocusing on Gradient Monoliths | 0.7 | - | 0.7 |
| A metagenomic study of the Hoatzin crop microbes to reveal novel carbohydrate-active enzymes | - | - | - |
| National Institute for Computational Sciences (NICS) NSF Center for Remote Data Analysis and Visualization | 4.2 | - | 4.2 |
| Blind Geothermal System Exploration in Active Volcanic Environments; Multi-phase Geo- physical and Geochemical Surveys in Overt and Subtle Volcanic Systems, Hawaii and Maui | 0.5 | - | 0.5 |
| In-situ protein-protein interaction network isPIN study | 0.1 | - | 0.1 |
| In-situ protein-protein interaction network isPIN study | 0.4 | - | 0.4 |
| Toward the Understanding of Induced Seismicity in Enhanced Geothermal Systems | 1.1 | - | 1.1 |
| Experiment-Based Model for the Chemical Interactions between Geothermal Rocks, Supercritical Carbon Dioxide and Water | 2.3 | - | 2.3 |
| Development of Advanced Thermal-Hydrological- Mechanical-Chemical (THMC) Modeling Capabilities for Enhanced Geothermal Systems | 1.0 | - | 1.0 |
| A New Analytic-adaptive model for EGS assessment, development and management support | 1.2 | - | 1.2 |
| Optimized Drilling and Completion of Abrasive Slurry Jet Microhole Arrays for Efficient Exploitation of Enhanced Geothermal Systems | 2.0 | - | 2.0 |
| Geochemistry and THMC Models for the Newberry EGS Project | 0.6 | - | 0.6 |
| Characterizing Fractures in Geysers Geothermal Field by Micro-seismic Data, Using Soft Computing, Fractals, and Shear Wave Anisotropy | 0.5 | - | 0.5 |
| THMC Modeling of EGS Reservoirs - Continuum through Discontinuum Representations | 0.6 | - | 0.6 |
| Note: Minor variances may occur due to rounding. (a) Other Direct Operating includes Work for Others, Federal Sponsors, Non-Federal Sponsors | | | |

Table 3.6

ARRA Job Reporting Continued

| Other Direct One walker ADDA Dreite to (a) (Cookie red) | | fe-to-Date Job | os |
|--------------------------------------------------------------------------------------------------------------------------------------------|---------|----------------|---------|
| Other Direct Operating ARRA Project (a) (Continued) | Created | Retained | Total |
| Modeling Li Distribution and its Effect on Anode Protection Layers | 2.3 | - | 2.3 |
| TCGA Data Analysis Center at Berkeley | 2.4 | - | 2.4 |
| Enabling Novel Cathode Electrode Design with Integrated Separator and Manufacturing Toolset for High Energy Prismatic Li-ion Battery Cells | 2.9 | - | 2.9 |
| Development of an 8kx8k pixel direct detection CMOS camera with single electron counting for cryoEM | - | - | - |
| Automated Continuous Commissioning of Commercial Buildings | 0.3 | - | 0.3 |
| Research Services Program - Geochemistry | 0.1 | - | 0.1 |
| TCGA Data Analysis Center at Berkeley | 0.8 | 0.2 | 1.0 |
| Innovative Building-Integrated Enthalpy Recovery | 0.4 | - | 0.4 |
| Novel Functions for Red Cell Proteins Lu and LW | 0.0 | 3.3 | 3.3 |
| Support of the SSA National Support Center Project | 0.0 | - | 0.0 |
| Total Other Direct Operating ARRA Projects (b) | 89.3 | 33.8 | 123 |
| Total DOE Direct ARRA Projects | 332.5 | 1,470.3 | 1,802.8 |
| Total Other Direct Operating ARRA Projects (b) | 89.7 | 33.7 | 123.3 |
| LBNL TOTAL | 422.2 | 1,503.9 | 1,926.1 |
| Note: Minor variances may occur due to rounding. | | | |

(a) Other Direct Operating includes Work for Others, Federal Sponsors, Non-Federal Sponsors.

4. Indirect Budgets

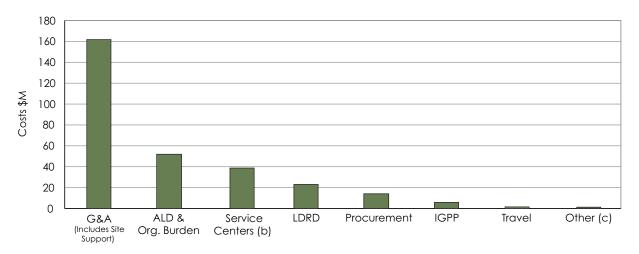




Figure 4.1

Indirect Budgets — FY2013 Costs (\$M)

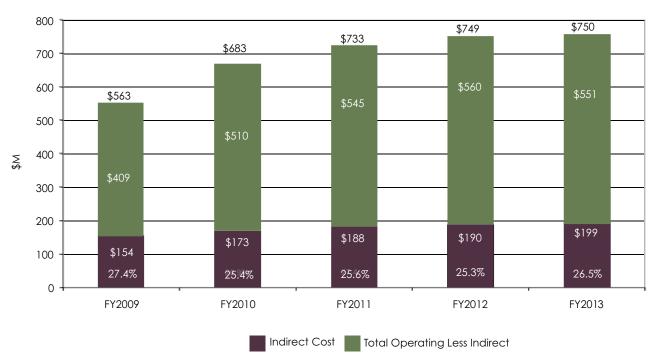
| Indirect Budgets (a) | FY2013 Costs (\$M) |
|-----------------------------|--------------------|
| G&A (Includes Site Support) | 161.8 |
| ALD & Organizational Burden | 52.3 |
| Service Centers (b) | 39.5 |
| LDRD | 22.8 |
| Procurement | 12.5 |
| IGPP | 6.5 |
| Travel | 1.7 |
| Other (c) | 0.2 |
| Total | 297.4 |



- (a) Summation of indirect budget provided only to show magnitude of dollars being managed and does not equate to total indirect costs since there are overlaps between indirect budgets. For example, some organization burden costs are included in G&A and Recharges. In FY2013, LDRD cost includes \$6.6M G&A assessed on LDRD projects.
- (b) Service Centers includes recharge cost centers that default to B&R YN01 (project type OHRCH) only.
- (c) Includes: Office of Homeland Security Charge.

Figure 4.2

Institutional Overhead Costs as a Percent of Operating Costs, FY2009 - FY2013



Note: Chart represents the institutional overhead cost structure for each fiscal year with adjustments for indirect double count of G&A on LDRD projects (DOE mandate to apply G&A to LDRD projects beginning FY2006). Institutional overhead costs include G&A, LDRD, Site Support, Travel, Procurement, and IGPP. Percent is the percentage of indirect cost to total operating cost.





Table 4.1

Institutional Costs by Division, FY2013 (\$K)

| Division | G&A (a) | LDRD (b) | Procurement | Travel | IGPP | Total |
|---------------------------------------|---------|----------|-------------|--------|-------|---------|
| Lab Directorate (a) | 16,765 | | | | | 16,765 |
| LDRD | | 22,848 | | | | 22,848 |
| Engineering | 3,360 | | | | | 3,360 |
| Associate Lab Director for Operations | | | | | | |
| ALD Office | 1,787 | | | | | 1,787 |
| Office of Institutional Assurance | 1,874 | | | | | 1,874 |
| Work Planning & Control | 918 | | | | | 918 |
| IGPP | | | | | 6,451 | 6,451 |
| Non-Cap | 6,594 | | | | | 6,594 |
| Work Force Diversity Office | 427 | | | | | 427 |
| Public Affairs | 3,724 | | | | | 3,724 |
| HR | 7,622 | | | | | 7,622 |
| Environmental/Health/Safety | 19,802 | | | | | 19,802 |
| Protective Services | 7,291 | | | | | 7,291 |
| Facilities | 42,195 | | 1,907 | | | 44,102 |
| OCFO | 14,870 | | 10,554 | 1,642 | | 27,065 |
| IT | 28,240 | | 27 | 14 | | 28,282 |
| General Lab | 6,336 | | | | | 6,336 |
| Total | 161,805 | 22,848 | 12,487 | 1,656 | 6,451 | 205,247 |

⁽a) Includes Site Support & Strategic Planning Support Activities (SPSA).

⁽b) LDRD costs include \$6.6M of G&A assessment.

Table 4.2

Institutional FTEs Charged by Division, FY2013

| Division | G&A (a) | LDRD (b) | Procurement | Travel | IGPP | Total |
|---------------------------------------|---------|----------|-------------|--------|------|-------|
| Lab Directorate (a) | 68.7 | | | | | 68.7 |
| LDRD | | 109.6 | | | | 109.6 |
| Engineering | 9.1 | | | | | 9.1 |
| Associate Lab Director for Operations | | | | | | |
| ALD Office | 7.9 | | | | | 7.9 |
| Office of Institutional Assurance | 10.1 | | | | | 10.1 |
| Work Planning & Control | 2.3 | | | | | 2.3 |
| IGPP | | | | | 3.2 | 3.2 |
| Non-Cap | 10.0 | | | | | 10.0 |
| Work Force Diversity Office | 2.0 | | | | | 2.0 |
| Public Affairs | 20.8 | | | | | 20.8 |
| HR | 45.9 | | | | | 45.9 |
| Environmental/Health/Safety | 104.3 | | | | | 104.3 |
| Protective Services | 11.4 | | | | | 11.4 |
| Facilities | 138.5 | | 17.6 | | | 156.0 |
| OCFO | 72.5 | | 67.7 | 9.7 | | 150.0 |
| IT | 94.5 | | | | | 94.5 |
| General Lab | 0.0 | | | | | 0.0 |
| Total | 598.0 | 109.6 | 85.3 | 9.7 | 3.2 | 805.7 |

⁽a) Includes Site Support & Strategic Planning Support Activities (SPSA).

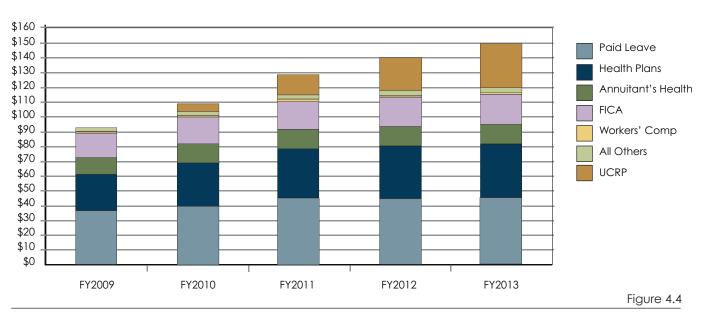
⁽b) LDRD projects conducted by multiple divisions as reflected in Table 1.3.





Figure 4.3





Gross Payroll Summary (\$M)

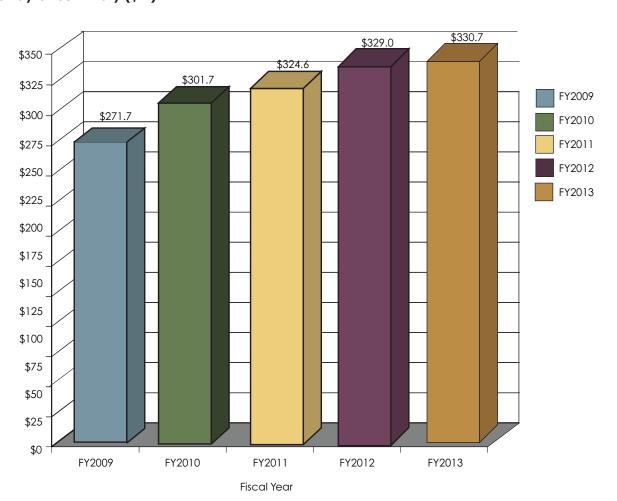


Table 4.3

Organizational Burden Costs and FTEs

Organizational burden includes costs for the management and supervision of division/department activities and is distributed over labor costs including campus and contract labor.

| Philips Cod Pools | FY201 | 13 |
|--------------------------------------------------|----------|---------|
| Division Cost Pools | Cost \$K | Avg FTE |
| Accelerator & Fusion Research | 1,852 | 9.9 |
| Advanced Light Source | 2,505 | 14.8 |
| Chemical Sciences | 1,473 | 8.2 |
| Computing Sciences | 5,918 | 36.6 |
| Environmental Energy Technology | 6,171 | 36.6 |
| Engineering | 5,746 | 28.1 |
| Earth Sciences | 4,318 | 21.4 |
| Facilities | 4,224 | 19.5 |
| Genomics - Onsite | 591 | 3.8 |
| Information Technology | 2,701 | 12.4 |
| Life Sciences | 4,402 | 30.8 |
| Materials Sciences | 3,882 | 18.8 |
| Nuclear Sciences | 1,836 | 12.5 |
| Physical Biosciences | 3,193 | 22.1 |
| Physics | 1,909 | 13.0 |
| Total | 50,719 | 288.5 |
| Note: Minor Variances may occur due to rounding. | | |

ALD Burden Costs and FTEs

Associate Lab Directorate burden includes costs for the management and supervision of ALD activities and is distributed over labor costs including campus and contract labor.

| Division Cost Pools | FY2013 | | |
|--------------------------------------------------|----------|---------|--|
| Division Cost Pools | Cost \$K | Avg FTE | |
| Biosciences | 926 | 2.9 | |
| Computing Sciences | 115 | 0.6 | |
| Energy and Environmental Sciences | 573 | 2.6 | |
| Total | 1,614 | 6.1 | |
| Note: Minor Variances may occur due to rounding. | | | |





Table 4.4

Service Center Costs and FTEs

Certain Laboratory services are provided by recharges that recover operational costs through various cost-allocation mechanisms; e.g., by assigning a dollar value to the work performed (a unit charge based on an hourly rate) or the products produced (unit charge per item).

| Division (a) | FY2013 | |
|---------------------------------|----------|---------|
| Division (α) | Cost \$K | Avg FTE |
| Accelerator & Fusion Research | 104 | 0.3 |
| Environmental Energy Technology | 2,182 | 16.1 |
| Engineering | 1,572 | 8.0 |
| Earth Sciences | 133 | 0.6 |
| Facilities | 11,431 | 3.1 |
| Genomics (JGI) | 5,000 | 10.4 |
| Information Technology | 7,210 | 18.3 |
| Life Sciences | 772 | 5.3 |
| Materials Sciences | 259 | 1.4 |
| Physical Biosciences | 5,776 | 9.0 |
| ALD Operations (b) | 5,103 | 10.1 |
| Total | 39,542 | 82.7 |

⁽a) Service Centers includes recharge cost centers that default to B&R YN01 (project type OHRCH) only and GSRA pass through costs.

⁽b) Includes: GSRA pass through costs.

Table 4.5

Distributed Recharges by Resource Category Trends, FY2009 - FY2013 (\$K)

| Distributed Recharge (a) (b) | FY2009 | FY2010 | FY2011 | FY2012 | FY2013 |
|-----------------------------------------|--------|--------|--------|--------|--------|
| Vehicle | 1,342 | 1,028 | 991 | 829 | 759 |
| MSD Facility | 310 | 234 | 246 | 331 | 259 |
| Building Manager | 143 | | | | |
| Animal Care | 494 | 549 | 744 | 720 | 665 |
| Creative Services | 1,481 | 1,582 | 2,010 | 1,511 | 1,507 |
| FAM Facility Recharge | | | | | 75 |
| ESD Sample Analysis Recharge | | | | | 131 |
| Warehouse Storage Recharge | | | | 51 | 128 |
| 88-Inch Accelerator Operations | 444 | 688 | 452 | 562 | 720 |
| JBEI Non-Material Recharge | 240 | 252 | 288 | 869 | 946 |
| JBEI Material Recharge | 3,742 | 3,642 | 4,034 | 4,095 | 4,845 |
| Telephone Services | 4,408 | 4,687 | 5,064 | 5,637 | 5,318 |
| EETD Recharge | 1,187 | 1,495 | 1,784 | 2,132 | 2,149 |
| Molecular Foundry | 81 | 197 | 213 | | |
| Computer/Net Recharges | 2,605 | 2,415 | 2,244 | 2,258 | 1,913 |
| Engineering Shop | 927 | 932 | 918 | 878 | 884 |
| CAD | 654 | 731 | 731 | 717 | 794 |
| ALS Proprietary Recharge | 764 | 872 | 646 | 823 | 617 |
| HTA Non-Material Recharge | 13 | | | | |
| HTA Material Recharge | 32 | | | | |
| JGI Recharge (Capillary Sequencing) (c) | 10,352 | 1,149 | 27 | 15 | |
| JGI WFO Administrative Charge (d) | 319 | 223 | 260 | 68 | |
| ESnet Recharge | 1,164 | 974 | 1,192 | 822 | 310 |
| JGI Occupancy Labor Recharge (d) | | | | 948 | 1,152 |
| JGI Occupancy Material Recharge (d) | | | | 2,684 | 3845 |
| Electricity | 9,106 | 9,855 | 12,576 | 10,795 | 10,597 |
| Mixed Waste Recharge/GL | 10 | 2 | 9 | 2 | 1 |
| National Center for Electron Microscopy | | | | 7 | 3 |
| GSRA - Material Recharge | 2,549 | 2,554 | 3,350 | 3,937 | 3,610 |
| GSRA - Non-Material Recharge | 1 | 1 | 1 | 0 | 7 |
| Low Background Facility | 72 | 45 | 45 | 29 | 48 |
| Total Recharges | 42,440 | 34,108 | 37,824 | 40,722 | 37,437 |

⁽a) Includes recharges credited back to direct operating accounts such as ALS, ESnet, JGI, etc.

⁽b) Does not include Procurement and Travel recharges.

⁽c) JGI Capillary Sequencing platform phased out in FY 2012.

⁽d) JGI WFO Administrative Charge phased out in FY 2012 and replaced by JGI Occupancy Labor and Material Recharges.

5. FINANCIAL STATEMENT





Table 5.1

Balance Sheet Comparative Statement of Financial Position (\$K)

| | FY2012 | FY2013 |
|------------------------------------|-------------|-------------|
| ASSETS: | | |
| Current Assets | | |
| Accounts Receivable | 4,440 | 7,407 |
| Inventories | 421 | 407 |
| Other Current Assets | 189 | 237 |
| Total Current Assets | 5,050 | 8,051 |
| Net Plant & Equipment | 711,869 | 681,395 |
| Total Assets | 716,919 | 689,446 |
| LIABILITIES AND EQUITY: | | |
| Liabilities: | | |
| Current Liabilities | | |
| Drafts Payable | 4,659 | (188) |
| Accounts Payable | 68,278 | 61,051 |
| Accrued Expenses | 52,964 | 54,110 |
| Other | 29,694 | 25,299 |
| Total Current Liabilities | 155,595 | 140,272 |
| Environmental Liabilities (Note 2) | 641,312 | 762,092 |
| ES&H Liability | 313,026 | 305,037 |
| Capital Lease Liability | 13,567 | 0 |
| Post-Retirement Benefits (Note 2) | 777,710 | 751,463 |
| Pension Plan Liability (Note 2) | 782,324 | 1,083,438 |
| Total Liabilities | 2,683,534 | 3,042,302 |
| DOE Equity: | | |
| Beginning Equity | (1,588,833) | (1,966,615) |
| Change in Equity | (377,782) | (386,241) |
| Ending Equity | (1,966,615) | (2,352,856) |
| TOTAL LIABILITIES AND EQUITY | 716,919 | 689,446 |

Note: FY2013 balances include prior FY2012 year-end adjustments posted in FY2013 for environmental, post-retirement benefits, and pension plan liabilities. These year-end adjustments were coordinated with DOE and referenced in the FY2012 LBNL Annual Report, Note 12.

Note 1

Summary of Significant Accounting Policies

Basis of Presentation

These financial statements have been prepared to report the financial position and results of operations of LBNL. They have been prepared from the books and records of the Laboratory in accordance with LBNL's accounting policies.

Reporting Entity

The Laboratory is a national research facility operated by UC for DOE under the terms of Contract DE-AC02-05CH11231 (Contract 31). The Laboratory's reporting entity status is that of an integrated contractor, meaning LBNL's accounts are integrated with those of DOE through the use of reciprocal accounts. All assets and liabilities are owned by the Federal Government.

Basis of Accounting

The financial records of the Laboratory conform to generally accepted accounting principles (GAAP) and cost accounting standards (CAS) when they do not conflict with the provisions of the DOE accounting directives for Management and Operating (M&O) Contractors and are in compliance with Contract 31 between UC and DOE.

Financial Sources

The Laboratory receives funding from DOE in accordance with the provisions of Contract 31. The Laboratory receives authorizations to incur costs and conduct operations through modifications to the contract.

Reimbursable work is performed for Federal and non-Federal entities. Costs are recorded and billed to the requesting entity by the Laboratory on behalf of DOE. Cash collected from these billings is transmitted to the U.S. Department of the Treasury and deposited in the DOE account. Non-Federally funded work performed at LBNL must be funded in advance.

Letter of Credit

The Laboratory received authority for expenditures according to a checks-paid letter of credit from the U.S. Department of the Treasury; Letter of Credit Contract Number DE-AC02-05CH11231 with Wells Fargo Bank (WFB). The WFB letter of credit was renewed on November 1, 2012 for a five year term.

Inventories

The Laboratory uses a perpetual inventory system. An annual physical inventory is performed according to a cyclical sampling plan approved by DOE. Stores inventories and precious metals are valued and charged based on a moving average costing method. Special materials are valued by DOE.

Property, Plant, and Equipment

Property, plant, and equipment are purchased, constructed, or fabricated in-house and include major modifications or improvements. Effective October 1, 2011, DOE increased the capitalization threshold to \$500K for items with an anticipated service life of two years or more. Property, plant and equipment items meeting these criteria are capitalized. Costs of construction and fabrication are capitalizable expenses and are recorded initially as construction/fabrication work in process. Upon completion or beneficial occupancy, the value is transferred to the appropriate fixed-assets account. Depreciation is computed using the straight-line method over the estimated useful life of the asset.

Liabilities

Liabilities represent the amount of monies that are likely to be paid by the Laboratory as a result of transactions or events that have already occurred. Liabilities cannot be incurred by LBNL without an authorized appropriation, except for approved unfunded liabilities.

Accrued Vacation and Sick Leave

Laboratory policy provides for employees' annual vacation benefits ranging from 10 to 16 hours per month, depending upon years of service. Vacation is earned and accrued on a monthly basis. Employees may accumulate vacation up to two times their annual leave. Unused earned vacation is paid 100% upon retirement or termination.

Each employee accumulates sick leave at a rate of eight hours per month. Unused sick leave accumulates until it is used. If an employee terminates before using sick leave, the benefit is forfeited without liability to the Laboratory. As such, no sick leave liability is recorded. Retiring employees are allowed to apply unused sick leave toward additional years of service.





Note 1

Summary of Significant Accounting Policies Continued

Retirement Plan

Most career employees are participants in the UC Retirement System (UCRS). UCRS consists of a 2-tier basic defined benefit plan (UCRP) and two voluntary plans composed of several investment funds that are funded with employer and employee contributions. Employees who first become eligible to participate in UCRP on or after July 1, 2013 will accrue benefits in the 2013 Tier. An

employee who began accruing benefits before July 1, 2013 will continue accruing benefits under the 1976 Tier until he or she has a break in service. If an employee returns to eligible employment on or after July 1, 2013 following a break in service, he or she will accrue additional service credit under the 2013 Tier.

Note 2

Year-End Adjustments

Subsequent to the Laboratory fiscal year-end, DOE made adjustments for final Post-Retirement Benefit and Pension Plan Liabilities. These amounts will be reflected In the Laboratory's actuals for October 2013. Both Post-Retirement Benefits and Pension Plan Liability decreased as of September 30, 2013. The reductions were a result of increased discount rates (4.75% for FY2013, up from 3.75% for FY2012), favorable asset returns, offset by additional experience expenses. These adjustments are the result of

coordination and approval by both DOE and UC.

Subsequent to the Laboratory fiscal year-end, DOE also made adjustments to Environmental Liabilities. The \$121M reduction was primarily due to a \$123M decrease in Active Facilities Liabilities (ACF), offset by a \$2M increase in Restructured Environmental Liabilities (REL).

The following is the adjusted balance sheet for FY2013:

Note 2

Year-End Adjustments Continued

| Adjusted Balance Sheet (\$K) | | | | |
|------------------------------|-------------|-----------|-----------------|--|
| | FY2013 | FY2013 | Adjusted FY2013 | |
| ASSETS: | | | | |
| Current Assets | | | | |
| Accounts Receivable | 7,407 | | 7,407 | |
| Inventories | 407 | | 407 | |
| Other Current Assets | 237 | | 237 | |
| Total Current Assets | 8,051 | 0 | 8,051 | |
| Net Plant & Equipment | 681,395 | | 681,395 | |
| Total Assets | 689,446 | 0 | 689,446 | |
| LIABILITIES AND EQUITY: | | | , | |
| Liabilities: | | | | |
| Current Liabilities | | | | |
| Drafts Payable | (188) | | (188) | |
| Accounts Payable | 61,051 | | 61,051 | |
| Accrued Expenses | 54,110 | | 54,110 | |
| Other | 25,299 | | 25,299 | |
| Total Current Liabilities | 140,272 | 0 | 140,272 | |
| Environmental Liabilities | 762,092 | (121,139) | 640,953 | |
| ES&H Liability | 305,037 | | 305,037 | |
| Capital Lease Liability | 0 | | 0 | |
| Post-Retirement Benefits | 751,463 | (189,756) | 561,707 | |
| Pension Plan Liability | 1,083,438 | (510,159) | 573,279 | |
| Total Liabilities | 3,042,302 | (821,054) | 2,221,248 | |
| DOE Equity: | | | | |
| Beginning Equity | (1,966,615) | | (1,966,615) | |
| Change in Equity | (386,241) | 821,054 | 434,813 | |
| Ending Equity | (2,352,856) | 821,054 | (1,531,802) | |
| Total Liabilities and Equity | 689,446 | 0 | 689,446 | |

6. PROCUREMENT & PROPERTY MANAGEMENT





Table 6.1

Purchases Placed Using Purchase Orders/Subcontracts

| Total POs | (\$K) | # Actions |
|------------------------|-----------|-----------|
| \$0 - \$25,000 | \$55,596 | 60,737 |
| \$25,001 - \$150,000 | \$66,092 | 1,174 |
| \$150,001- \$1,000,000 | \$95,927 | 307 |
| \$1,000,001 + | \$121,117 | 37 |

Table 6.2

Procurement Purchase Order Dollar Amount by Division

| Division | PO (\$K) |
|-----------------------------------|----------|
| Accelerator & Fusion Research | 3,713 |
| Advanced Light Source | 13,996 |
| Chief Financial Officer | 8,670 |
| Chemical Sciences | 4,891 |
| Computational Research | 8,073 |
| Computing Sciences | 1,029 |
| Environmental Energy Technologies | 28,450 |
| Engineering | 5,026 |
| Environment/Health/Safety | 5,108 |
| Earth Sciences | 10,034 |
| Facilities | 60,366 |
| Genomics | 28,238 |
| Human Resources | 1,207 |
| Information Technology | 13,319 |
| Laboratory Directorate | 2,072 |
| Life Sciences | 7,946 |
| Material Sciences | 15,460 |
| NERSC | 21,055 |
| Nuclear Science | 5,361 |
| Operations | 27,261 |
| Public Affairs | 478 |
| Physical Biosciences | 31,627 |
| Physics | 18,509 |
| Protective Services | 6,897 |
| Scientific Networking | 9,945 |
| Total | 338,732 |

Figure 6.1

Procurement Spend by Channel (\$K)

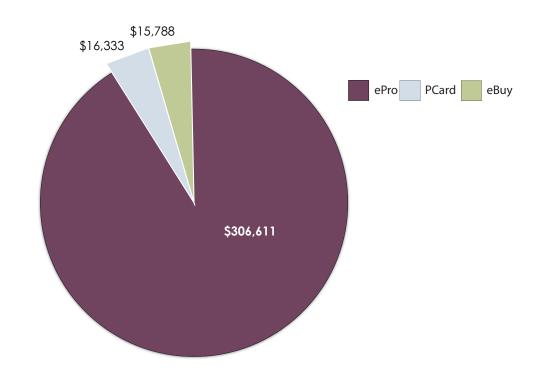
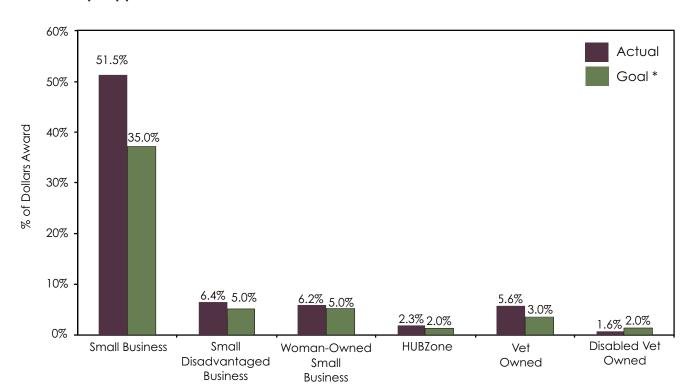


Figure 6.2

Laboratory Supplier Socioeconomic Performance



*DOE Balanced Scorecard Goal





Figure 6.3

Cycle Time for Purchase Orders <\$25k — Subcontracting Groups FY2013

Cycle Time for All Subcontracting Groups <=\$25k (Excludes Modifications)

9/30/13 Goal = 11.5 Days

Number of Transactions

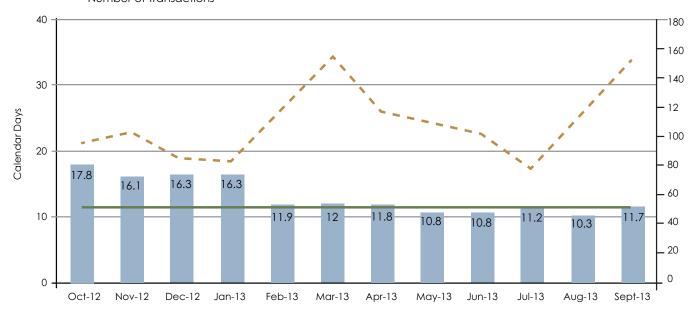


Figure 6.4

Procurement Cost Savings



Table 6.3

Property Management Activity

| | # of Assets | Acquisition Value | |
|-----------------------------------|-------------|----------------------|------------|
| Equipment* | 8,939 | 691,473,072 | |
| Attractive* | 20,291 | 55,434,740 | |
| High Risk* | 11 | 182,976,068 | |
| Total Assets | 29,241 | 929,883,880 | |
| Computers Laptops | 5,651 | 10,825,711 | |
| Computer Desktops | 6,696 | 14,043,934 | |
| Tablets | 758 | 483,474 | |
| Total | 13,105 | 25,353,119 | |
| Inventory campaign | Base | Positive Resolutions | % Positive |
| Controlled | 30 | 30 | 100% |
| Sensitive | 3,374 | 3,369 | 100% |
| High Risk | 9 | 9 | 100% |
| Final Results | 3,413 | 3,408 | 99.85% |
| Validation Size | 50 | 50 | 100% |
| Assets Scanned | 3,165 | 3,413 | 93% |
| Division | Asset Count | Acquisiton Value | |
| Accelerator & Fusion Research | 1,320 | 85,825,218 | |
| Advanced Light Source | 1,416 | 197,675,715 | |
| Chief Financial Officer | 290 | 422,671 | |
| Chemical Sciences | 1,395 | 30,168,612 | |
| Computational Research | 1,741 | 26,870,041 | |
| Computing Sciences | 293 | 12,549,221 | |
| Environmental Energy Technologies | 2,513 | 25,077,816 | |
| Engineering | 932 | 13,031,403 | |
| Environment/Health/Safety | 627 | 3,105,604 | |
| Earth Sciences | 2,106 | 22,526,176 | |
| Facilities | 1,157 | 9,989,137 | |
| Genomics | 1,481 | 32,203,988 | |
| Human Resources | 196 | 223,673 | |
| Information Technology | 2,745 | 19,127,143 | |
| Laboratory Directorate | 115 | 230,230 | |
| Life Sciences | 1,653 | 31,318,830 | |
| Material Sciences | 3,650 | 135,984,964 | |
| NERSC | 1,153 | 74,807,461 | |
| Nuclear Science | 1,065 | 63,026,943 | |
| Operations | 28 | 44,274 | |
| Public Affairs | 125 | 241,051 | |
| Physical Biosciences | 1,977 | 39,194,763 | |
| Physics | 967 | 105,547,875 | |
| Protective Services | 296 | 691,070 | |
| TOTAL ASSETS | 29,241 | 929,883,880 | |

^{*} Equipment: Has an acquisition cost > \$10,000 and expected useful life of > 2 years; Attractive: Attractive regardless of cost (laptops, desktops, workstations, tablets and radios); High Risk: Property used in the nuclear fuel cycle, firearms, ammunition and explosives, nuclear weapon components or nuclear weapon-like components that do not contain nuclear material as listed in DOE O 474.2.

7. ACRONYMNS & KEY TERMS





Acronyms and Key Terms

| AFRD ALS ANL ARPA-E | Accelerator and Fusion Research Division Advanced Light Source Argonne National Laboratory Advanced Research Projects Agency-Energy |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| ARRA | American Recovery and Reinvestment Act of 2009 |
| A/S | Assistant Secretary (DOE) |
| B&R BA BES BNL BSC | Budget and Reporting Budget Authority Basic Energy Sciences Brookhaven National Laboratory Business Systems Committee |
| CAD | Computer Aided Design |
| CFO | Chief Financial Officer |
| CRADA | Cooperative Research and Development Agreement |
| DARHT DNA DOD DOE DOI | Dual Axis Radiographic Hydrodynamic Test Deoxyribonucleic Acid Department of Defense Department of Energy Department of Interior |
| EERE | Energy Efficiency and Renewable Energy |
| ERWM | Environmental Restoration and Waste Management |
| EHSS | Environment/Health/Safety/Security |
| ESnet | Energy Sciences Network |
| FNAL FTE FY | Fermi National Accelerator Laboratory Full-Time Equivalent Fiscal Year (Oct. 1 through Sept. 30) |
| G&A | General and Administrative |
| G/L | General Ledger |
| GSO | Goods and Services on Order |
| HR | Human Resources |
| HWC | Hazardous Waste Charge |
| HZE | High-Z High-Energy |
| I-MANAGE IC | Integrated Management Navigation System Integrated Contractors |

| ICO IT | Integrated Contractor Order Information Technology |
|------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LANL LBF LBNL LDRD LLNL | Los Alamos National Laboratory Low Background Facilities Lawrence Berkeley National Laboratory Laboratory Directed Research and Development Lawrence Livermore National Laboratory |
| M&O | Management & Operating |
| NASA NERSC NIH NNSA | National Aeronautics and Space Administration National Energy Research Scientific Computing Center National Institutes of Health National Nuclear Security Administration |
| O&M OASDI OCFO OHRCH ORNL OSPIP | Operations & Maintenance Old Age, Survivors and Disability Insurance Office of the Chief Financial Officer Overhead Recharge Oak Ridge National Laboratory Office of Sponsored Projects and Industry Partnerships |
| PLF PNNL PPPL | Paid Leave Factor Pacific Northwest National Laboratory Princeton Plasma Physics Laboratory |
| R&D | Research and Development |
| SLAC SNAP SNL STARS | Stanford Linear Accelerator Center SuperNova Acceleration Project Sandia National Laboratories Standard Accounting and Reporting System |
| UC | University of California |
| WFO | Work for Others |

Key Terms

Throughout this document, \$K means dollars in thousands, \$M means dollars in millions, and \$B means dollars in billions.

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